1
1 SUPERIOR COURT OF THE STATE OF CALIFORNIA
2 FOR THE COUNTY OF LOS ANGELES
3 DEPARTMENT 308 HON. CHARLES MC COY, JUDGE
4 RICHARD BOEKEN,)
5 PLAINTIFF,)
6)
) CASE NO. BC226593
7 VS.)
)
8 PHILIP MORRIS,)
INCORPORATED, A)
9 CORPORATION; INTERNATIONAL)
HOUSE OF PANCAKES)
10 INCORPORATED, A)
CORPORATION.)
11)
DEFENDANTS.)
12 _____)
13 REPORTER'S DAILY TRANSCRIPT OF PROCEEDINGS
14 THURSDAY, APRIL 5TH, 2001
15 APPEARANCES:
16 (FOR PLAINTIFF) LAW OFFICES OF
MICHAEL J. PIUZE
17 11755 WILSHIRE BLVD.
SUITE 1170
18 LOS ANGELES, CA 90025
19 (FOR DEFENDANTS) ARNOLD & PORTER
BY: MAURICE A. LEITER
20 JOHN CARLTON
777 S. FIGUEROA ST.
21 44TH FLOOR
LOS ANGELES, CA 90017
22
LISA C. RIDLEY
23 OFFICIAL REPORTER
600 S. COMMONWEALTH AVE.
24 ROOM 308
LOS ANGELES, CA 90005
25
VOLUME 11A OF
26 PAGES 1639 THROUGH 1736
27
28
1639
1 LOS ANGELES, CALIFORNIA; THURSDAY, APRIL 5TH, 2001
2 9:00 A.M.
3 DEPARTMENT 308 HON. CHARLES MC COY, JUDGE
4
5 (THE FOLLOWING PROCEEDINGS WERE
6 HELD IN OPEN COURT:)
7
8 THE COURT: FOR THE RECORD, COUNSEL ARE
9 PRESENT. WE ARE OUTSIDE THE PRESENCE OF THE JURY.
10 AND WHAT WE ARE TRYING TO DO IS THE COURT IS GOING
11 TO BE LISTENING TO OBJECTIONS AS TO THE CERTAIN
12 OBJECTIONS AS TO READING FROM CERTAIN TRANSCRIPTS.
13 PROCEED.
14 MR. LE BERTHON: ADAM LE BERTHON, FOR THE
15 RECORD.
16 AND WE HAVE GONE THROUGH THE FIRST
17 OF, I THINK, THREE VOLUMES OF MR. MELE'S TESTIMONY
18 AND THERE'S A NUMBER OF OBJECTIONS WE WERE NOT ABLE

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Source: http://industrydocuments.ucsf.edu/docs/yrhd0001

19 TO RESOLVE. IF I COULD TURN YOUR ATTENTION TO PAGE
20 17 AT 17727.
21 YOU KNOW WHAT, LET US SKIP THAT
22 OBJECTION. CAN I GO TO 17736, PLEASE, LINES 15
23 THROUGH 16. THE WITNESS INDICATES WE "WERE
24 ESSENTIALLY FUNCTIONING AS A DRUG COMPANY."
25 THAT'S NOT RESPONSIVE, IT'S
26 ARGUMENTATIVE.
27 THE COURT: WHO IS THE WITNESS?
28 MR. LE BERTHON: THE WITNESS IS A FORMER
1640
1 EMPLOYEE OF PHILIP MORRIS. HE WAS A BEHAVIORAL
2 PSYCHOLOGIST WHO WAS CONDUCTING RAT STUDIES.
3 THE COURT: WELL, IT SOUNDS TO ME HE IS
4 SAYING WE ARE DOING WHAT A DRUG COMPANY DID AS FAR
5 AS THE TESTING IS CONCERNED. OVERRULED.
6 MR. LE BERTHON: HE IS TALKING ABOUT THE
7 VARIOUS WORK THAT THEY WERE PERFORMING IN THE
8 LABORATORY.
9 THE COURT: I AM GOING TO OVERRULE THAT.
10 IF HE WAS THE PERSON CONDUCTING THE
11 TESTS ALONG THE SAME LINES THAT DRUG COMPANIES DO,
12 THAT STATEMENT IS OKAY.
13 MR. LE BERTHON: COULD YOU TURN NEXT TO
14 PAGE 17767.
15 THE COURT: YES, SIR.
16 MR. LE BERTHON: THIS IS ONE OF SEVERAL
17 RELATED EXPERTS THAT TALK ABOUT A VISIT TO THE
18 LABORATORY BY ATTORNEYS FOR PHILIP MORRIS, THE LAW
19 FIRM OF SHOOK, HARDY, THAT PARTICULAR TESTIMONY IS
20 NOT RELEVANT AND THE PREJUDICE OUTWEIGHS ANY
21 PROBATIVE VALUE.
22 THE COURT: WHERE DOES IT START?
23 MR. LE BERTHON: PAGE 17767, WE ARE
24 TALKING ABOUT THE EXCERPT BETWEEN LINES 7 AND 14.
25 THE COURT: THAT SHOULD BE STRICKEN.
26 MR. LE BERTHON: AND AGAIN, THE SIMILAR
27 OBJECTION TO SIMILAR LINE OF TESTIMONY ON PAGE 769,
28 BETWEEN LINES 6 AND 16.
1641
1 MR. PIUZE: YOUR HONOR, IF THE FIRST
2 OBJECTION WAS GRANTED, THIS ONE SHOULD ALSO BE
3 GRANTED.
4 THE COURT: YES, FOR THE SAME REASONS.
5 TELL ME THE LINES, SIR. MAY I HAVE
6 THE LINE NUMBERS.
7 MR. LE BERTHON: YES, ON PAGE 769, LINES
8 6 THROUGH 16, AND THEN A SIMILAR OBJECTION FOR PAGE
9 1770, LINE 19, THROUGH 1771, LINE 3.
10 THE COURT: ALL RIGHT, FAIR ENOUGH. LINE
11 7 ON 771?
12 MR. LE BERTHON: YES, SIR.
13 THE COURT: ALL RIGHT, SIR.
14 MR. LE BERTHON: AND THEN LASTLY ANOTHER
15 SET OF OBJECTIONS BEGINNING ON PAGE 177 -- I AM
16 SORRY -- 17778 LINE 3. IT DISCUSS MR. MELE'S
17 EFFORTS TO FIND A NEW JOB WHEN HIS EMPLOYMENT AT
18 PHILIP MORRIS TERMINATED. AGAIN, IT IS NOT
19 RELEVANT. THE PROBATIVE VALUE IS OUT-WEIGHED BY
20 ANY PREJUDICE.
21 THE COURT: MR. PIUZE.
22 MR. PIUZE: I SEE THAT BASICALLY AS MR.
23 FARONE'S TESTIMONY, YESTERDAY, WERE YOU FIRED, DID

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

24 YOU QUIT, WHAT HAPPENED, WHY, THAT KIND OF STUFF.
25 IT IS NOT A HUGE THING TO ME, BUT I
26 THOUGHT IT WAS THE SAME THING THEY BROUGHT UP WITH
27 FARONE.
28 THE COURT: THIS HAS OCCURRED BEFORE WITH
1642
1 ANOTHER WITNESS. IS THIS DIFFERENT THAN FARONE?
2 MR. LE BERTHON: IT IS JUST TALKING ABOUT
3 WHAT IT WOULD BE LIKE IF HE WERE TERMINATED FROM A
4 JOB AS A PROFESSOR. IF HE HAD TENURE HE WOULD HAVE
5 HAD ONE YEAR IN ORDER TO FIND A NEW JOB.
6 HERE HE ONLY HAD SIX MONTHS. I
7 WOULD TEND TO AGREE WITH MR. PIUZE, IT IS NOT A BIG
8 POINT.
9 THE COURT: LET'S PASS ON THAT, BECAUSE
10 WE HAD THAT KIND OF TESTIMONY YESTERDAY. THANK
11 YOU.
12 MR. LE BERTHON: I MISSPOKE. THERE IS
13 ONE OTHER AREA.
14 THE COURT: YES, SIR.
15 MR. PIUZE: PAGE 17797, LINE 7, THIS
16 BLOCK OF TESTIMONY INVOLVES THE WITNESS'S PRIOR
17 TESTIMONY BEFORE CONGRESS.
18 THE COURT: AND HOW FAR DOES IT GO?
19 MR. LE BERTHON: IT GOES ALL THE WAY
20 THROUGH THE MIDDLE OF PAGE 17799.
21 THE COURT: THE "THEY" IN THIS WOULD BE
22 WHO? LINE 22, WHO IS "THEY"? IS THAT PHILIP
23 MORRIS?
24 MR. PIUZE: YES.
25 THE COURT: AND THE BASIS FOR THE
26 OBJECTION? RELEVANCE AND 352?
27 MR. LE BERTHON: RELEVANCE, 352,
28 KNORR-PENNINGTON AND CIVIL CODE SECTION 47.
1643
1 THE COURT: WHAT ABOUT KNORR-PENNINGTON,
2 MR. PIUZE?
3 MR. PIUZE: WELL, I DON'T THINK IT
4 APPLIES TO THIS. THIS IS WHAT PHILIP MORRIS'
5 SENIOR EXECUTIVES WERE TELLING TO THESE PEOPLE WHO
6 TESTIFIED, THEY WEREN'T COMPLIMENTARY TO US. THIS
7 ISN'T EVEN ABOUT CONGRESS, THIS IS ABOUT THE TWO
8 ACTIONS OF PHILIP MORRIS.
9 THE COURT: IT WILL BE OVERRULED.
10 OBJECTION OVERRULED.
11 BUT WITHOUT COLLOQUY, IN OTHER
12 WORDS, WHEN YOU READ FROM THIS TRANSCRIPT, MAKE
13 SURE THAT ALL THE OBJECTIONS ARE STRICKEN.
14 MR. PIUZE: YES.
15 THE COURT: THAT ALL OBJECTIONS AND
16 COLLOQUY OF LAWYERS.
17 ANYTHING ELSE?
18 MR. LE BERTHON: THAT IS IT WITH RESPECT
19 TO THIS FIRST TRANSCRIPT.
20 MR. PIUZE: IF I COULD JUST SAY THE
21 FOLLOWING: WE WERE TO MEET EARLIER THIS MORNING,
22 THE MEETING DIDN'T OCCUR AS EARLY AS IT SHOULD
23 HAVE.
24 WE GOT THROUGH ONE OF THESE ENTIRE
25 TRANSCRIPTS.
26 I THINK BECAUSE OF YOUR GUIDANCE
27 JUST NOW, GETTING THROUGH THE OTHERS WILL BE A LOT
28 FASTER.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

1644
1 IF WE COULD TAKE A LITTLE BREAK AT
2 THE END OF THE FIRST ONE, WE COULD SET UP THE NEXT
3 ONE.
4 THE COURT: WELL, LET'S HOPE SO, BECAUSE
5 I HAVE THE JURY OUT THERE.
6 MR. PIUZE: I UNDERSTAND.
7 MR. LEITER: JUST TO BE CLEAR, YOUR
8 HONOR, WE ARE A LITTLE CONCERNED ABOUT THIS. WE
9 GOT CHANGE DESIGNATIONS FROM THE PLAINTIFF LAST
10 NIGHT. WE DIDN'T HAVE A CHANCE TO LOOK AT THEM
11 UNTIL HAD LAST NIGHT.
12 THIS WAS SOMETHING THAT CANDIDLY WE
13 BELIEVE SHOULD HAVE HAPPENED WEEKS AGO AND IT IS
14 ALL HAPPENING ON THE MORNING OF THE PLANNED READING
15 OF THE TESTIMONY.
16 SO JUST FOR THE RECORD, WE ARE
17 DOING THE BEST WEEK. BUT WE GOT THESE THINGS LAST
18 NIGHT.
19 THE COURT: I UNDERSTAND COMPLETELY.
20 WELL, LET'S ADDRESS THIS LATER.
21 GET OUR JURY GOING AND WE WILL HAVE
22 TO TALK ABOUT PROCEEDING HERE BECAUSE WE SHOULDN'T
23 BE TAKING 15 MINUTES LIKE THIS.
24 THE JURY, PLEASE.
25 MR. LEITER: ONE MORE MATTER, MR.
26 LE BERTHON WILL BE FOLLOWING ALONG. IF THERE IS AN
27 OBJECTION TO BE MADE, WE WOULD LIKE TO ASK
28 PERMISSION FOR MR. LE BERTHON TO OBJECT.
1645
1 THE COURT: HE IS MORE THAN WELCOME TO DO
2 THAT.
3 MR. LEITER: THANK YOU, YOUR HONOR.
4
5 (THE FOLLOWING PROCEEDINGS
6 WERE HELD IN OPEN COURT IN
7 THE PRESENCE OF THE JURY.)
8
9 THE COURT: GOOD MORNING, LADIES AND
10 GENTLEMEN.
11 WE HAVE A CLERK STANDING IN FOR
12 MARTY GODDERZ THIS MORNING.
13 WE WERE ON THE BENCH HERE FROM 9:00
14 TO 9:15. I TOLD YOU THIS WILL RARELY HAPPEN. IT
15 DID HAPPEN THIS MORNING, SOMETHING CAME UP THAT WE
16 HAD TO GO OVER OUTSIDE OF YOUR PRESENCE BEFORE WE
17 COULD BEGIN.
18 ALL RIGHT. OUR JURY PANEL IS WITH
19 US, COUNSEL ARE PRESENT.
20 MR. PIUZE, YOU MAY CALL YOUR NEXT
21 WITNESS.
22 MR. PIUZE: YOUR HONOR, THE NEXT WITNESS
23 THAT I AM GOING TO CALL IS BY PRIOR TESTIMONY. AND
24 THE NAME OF THE WITNESS IS DR. PAUL MELE, M-E-L-E.
25 AND I WOULD ASK MR. RAY GOLDSTEIN
26 TO ACT AS MR. MELE SEE WE CAN READ THIS TRANSCRIPT.
27 THE COURT: VERY WELL.
28 LADIES AND GENTLEMEN, THIS IS THE
1646
1 TRANSCRIPT OF -- IS THIS TESTIMONY OR A DEPOSITION
2 OR TESTIMONY IN COURT?
3 MR. PIUZE: THIS WAS TESTIMONY IN COURT
4 ON DECEMBER 15, 1998 IN FLORIDA.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

5 THE COURT: ALL RIGHT.
6 THIS IS TESTIMONY TAKEN IN ANOTHER
7 STATE, IN THE STATE OF FLORIDA, IN ANOTHER CASE.
8 IT WAS TAKEN UNDER OATH. THERE WAS A CLERK IN THAT
9 COURTROOM WHO HAD THE WITNESS STAND UP, SWEAR, TELL
10 THE TRUTH, THE WHOLE TRUTH AND NOTHING BUT THE
11 TRUTH, SO HELP HIM GOD. AND THEN HE WAS EXAMINED
12 AND CROSS-EXAMINED ON THE RECORD.
13 THAT HAVING BEEN SO, THAT HAVING
14 BEEN SAID, WHILE OBVIOUSLY WE DON'T HAVE THE LIVE
15 WITNESS HERE, THIS IS, UNDER THE RULES, PROPER
16 EVIDENCE THAT THE COURT WOULD ALLOW INTO THE
17 COURTROOM.
18 SINCE WE DON'T HAVE A LIVE WITNESS,
19 WHAT WE WILL DO IS HAVE SOMEONE SIT UP HERE AND
20 ANSWER THE QUESTIONS, READ ANSWERS TO THE
21 QUESTIONS.
22 ALL RIGHT, WHAT I WANT YOU TO
23 REMEMBER -- MR. GOLDSTEIN?
24 MR. GOLDSTEIN: YES, SIR.
25 THE COURT: -- MR. GOLDSTEIN IS NOT THE
26 WITNESS, THE REAL WITNESS. ALL RIGHT. SO THE WAY
27 HE READS THE ANSWERS, HIS OWN PERSONAL BEHAVIOR,
28 DEMEANOR, ALL THAT, IS IRRELEVANT TO YOU.
1647
1 BECAUSE IT IS NOT THE SAME PERSON,
2 IS IT?
3 THE ONLY THING THAT YOU CAN RELY ON
4 AS EVIDENCE HERE ARE THE ACTUAL WORDS, THE ACTUAL
5 ANSWERS IN WORDS THAT COME OUT OF THE TRANSCRIPT.
6 AND ALSO REMEMBER THIS, THIS IS
7 EVIDENCE AT THIS POINT. I AM ALLOWING IT INTO THE
8 COURTROOM BUT YOU ARE THE ONES THAT DECIDE WHETHER
9 OR NOT TO BELIEVE IT. YOU ARE THE ONES. IF IT IS
10 BELIEVABLE TO YOU, THEN YOU BELIEVE IT. IF IT IS
11 NOT BELIEVABLE TO YOU, THEN YOU DON'T BELIEVE IT.
12 THAT IS ENTIRELY YOUR DETERMINATION.
13 THAT HAVING BEEN SAID, MR. PIUZE,
14 YOU MAY PROCEED, SIR.
15
16
17 PAUL C. MELE,
18 COURTROOM TESTIMONY BEING READ BY DEPOSITION:
19 MR. PIUZE: THANK, YOUR HONOR.
20 "Q DR. MELE, PLEASE
21 TELL THE MEMBERS OF THE JURY YOUR FULL
22 NAME AND YOUR PRESENT ADDRESS.
23 "A MY NAME IS PAUL
24 CAMILLE MELE. I LIVE IN
25 [DELETED]
26 "Q COULD YOU SPELL YOUR
27 LAST NAME; M-E-L-E?
28 "A CORRECT.
1648
1 "Q DURING WHAT
2 TIMEFRAME WERE YOU EMPLOYED BY PHILIP
3 MORRIS?
4 "A I STARTED WORKING AT
5 PHILIP MORRIS IN NOVEMBER OF 1981 AND
6 STOPPED WORKING THERE IN DECEMBER OF
7 1984.
8 "Q YOU HAVE GOT A PH.D.
9 IN EXPERIMENTAL PSYCHOLOGY. TELL US

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Tobacco Industry Documents Library at UCSF http://www.industrydocuments.ucsf.edu/docs/yrhd0001

10 WHAT FIELD THAT ENCOMPASSES,
11 EXPERIMENTAL PSYCHOLOGY.
12 "A THAT'S A RESEARCH
13 DEGREE THAT TRAINS YOU TO CONDUCT
14 STUDIES ON VARIOUS ASPECTS OF
15 BEHAVIOR. MY SPECIALTY HAD TO DEAL
16 WITH ALL, HAD TO DEAL ALL WITH ANIMAL
17 WORK. AND THE VAST MAJORITY OF MY
18 TRAINING AND WORK IN GRADUATE SCHOOL
19 WAS IN THE FIELD OF BEHAVIORAL
20 PHARMACOLOGY WHERE WE WERE LOOKING AT
21 THE EFFECTS OF DRUGS ON THE BEHAVIOR,
22 USING RATS, AND ALSO TRYING TO GET
23 SOME IDEA ON HOW THOSE DRUGS AFFECTED
24 THE BRAINS OF THE RATS AS IT ALTERED
25 THEIR BEHAVIOR.
26 "Q SO AS AN
27 EXPERIMENTAL PSYCHOLOGIST, YOU DO NOT
28 GET INVOLVED WITH TREATING PEOPLE?
1649
1 "A CORRECT.
2 "Q AND DIAGNOSING
3 PEOPLE AND THAT KIND OF THING?
4 "Q NOW, LOOKING AT YOUR
5 WORK HISTORY, AND I AM A LITTLE
6 CONFUSED BY THIS, AFTER YOU COMPLETED
7 YOUR PH.D. IN 1980, THERE IS A LISTING
8 HERE FROM '79 TO '81, POST DOCTORAL
9 TRAINING AT THE ENVIRONMENTAL
10 TOXICOLOGY CENTER, UNIVERSITY OF
11 WISCONSIN IN MADISON. DID THAT
12 FOLLOW?
13 "A YES. ESSENTIALLY, I
14 COMPLETED GRADUATE WORK AT THE END OF
15 '79. THE DEGREE WASN'T CONFERRED
16 UNTIL JANUARY 1980, AND IT WAS JUST
17 BEFORE THAT THAT I WENT TO WISCONSIN
18 TO DO POST DOCTORAL WORK. SO IT WAS
19 '79 I LEFT GRADUATE SCHOOL, THE END OF
20 '79 I STARTED AT WISCONSIN.
21 "Q AND WHAT WAS THE
22 FOCUS OF YOUR POST DOCTORAL WORK AT
23 THE UNIVERSITY OF WISCONSIN?
24 "A THAT WAS TO EXAMINE
25 THE EFFECTS OF TOXIC AGENTS, INSTEAD
26 OF DRUGS, MORE ENVIRONMENTAL
27 POLLUTANTS, LEAD, POLYCHLORINATED
28 BIPHENYLS, DIOXINS, ON THE DEVELOPMENT
1650
1 AND BEHAVIOR OF MONKEYS. WE EXAMINED
2 BOTH THE BEHAVIOR AND BRAIN
3 DEVELOPMENT AND HOW THEY WERE ALTERED
4 BY EXPOSURE TO THESE ENVIRONMENTAL
5 POLLUTANTS EARLY IN LIFE.
6 "Q OKAY. NOW, GOING
7 THROUGH IN CHRONOLOGICAL ORDER, THERE
8 IS OBVIOUSLY A LISTING, AND YOU WERE A
9 RESEARCH SCIENTIST AT PHILIP MORRIS,
10 BUT I WILL DEAL WITH THAT SEPARATELY.
11 "A OKAY.
12 "Q I AM GOING TO GO
13 THROUGH THE OTHER POSITIONS THAT YOU
14 HELD.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by Arcadia https://industrydocuments.ucsf.edu/docs/yrhd0001

15 "FOR A PERIOD OF TIME, YOU
16 TAUGHT IN THE DEPARTMENT OF PSYCHOLOGY
17 AT VIRGINIA COMMON WEALTH UNIVERSITY.
18 WAS THAT ALSO WHEN YOU WERE AT PHILIP
19 MORRIS?
20 "A YES. WHILE WE WERE
21 AT PHILIP MORRIS, I OBTAINED AN
22 ADJUNCT PROFESSORSHIP AT V.C.U. WHERE
23 WE WERE ABLE TO TEACH ON A SMALL
24 SCALE.
25 "Q AND AFTER YOU LEFT
26 PHILIP MORRIS, YOU WENT TO WORK FOR
27 THE UNITED STATES GOVERNMENT, THE
28 DEPARTMENT OF DEFENSE?
1651
1 "A CORRECT.
2 "Q AND SPECIFICALLY, IT
3 SAYS FROM 1985 TO 1989, YOU WERE A
4 RESEARCH PSYCHOLOGIST, BEHAVIORAL
5 SCIENCES DEPARTMENT, ARMED FORCES
6 RADIOBIOLOGY RESEARCH INSTITUTE IN
7 BETHESDA, MARYLAND, SO TELL US WHAT
8 YOUR WORK INVOLVED DURING THAT
9 TIMEFRAME.
10 "A THAT WAS A D.O.D.,
11 DEPARTMENT OF DEFENSE RESEARCH LAB AND
12 THE WORK THERE INVOLVED EVALUATING THE
13 EFFECTS OF IONIZING RADIATION AND
14 DRUGS THAT WOULD PROTECT AGAINST
15 IONIZING RADIATION ON THE BEHAVIOR OF
16 ANIMALS PRIMARILY RATS AND MONKEYS AND
17 ALSO ON SOME OF THE BRAIN EFFECTS OF
18 RADIATION AND HOW IT WOULD, AGAIN,
19 EFFECT BEHAVIOR.
20 "Q AND I SEE FROM 1990
21 TO 1994 YOU WERE THE PROJECT MANAGER,
22 COMPLEX TASK PERFORMANCE PROJECT,
23 BEHAVIORAL SCIENCE DEPARTMENT, ARMED
24 FORCES RADIOBIOLOGY RESEARCH
25 INSTITUTE.
26 "A IT WAS A PROMOTION.
27 I MANAGED A LABORATORY THEN. I HAD
28 SEVERAL PH.D.'S WORKING UNDER ME IN
1652
1 ADDITION TO CONDUCTING MY OWN STUDIES.
2 SO IT WAS JUST A PROGRESSION TO A MORE
3 RESPONSIBLE POSITION.
4 "Q DOING ESSENTIALLY
5 THE SAME --
6 "A SAME WORK, SIMILAR.
7 "Q SAME FIELD?
8 "A SAME AREAS.
9 "Q NOW AT SOME POINT
10 YOU MADE A TRANSFER WITHIN THE
11 DEPARTMENT OF DEFENSE. AND PRESENTLY
12 YOU ARE AT THE WALTER REED ARMY
13 HOSPITAL?
14 "A THE WALTER REED ARMY
15 INSTITUTES OF RESEARCH WHICH IS
16 LOCATED NEXT TO THE WALTER REED ARMY
17 MEDICAL CENTER, NEXT TO THE HOSPITAL,
18 YES.
19 "Q WHEN DID YOU GO WITH

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

20 THE WALTER REED ARMY INSTITUTE OF
21 RESEARCH?
22 "A IN FEBRUARY OF 1995.
23 "Q AND YOU HAVE BEEN
24 THERE EVER SINCE?
25 "A CORRECT
26 "Q DOING WHAT?
27 "A MY JOB THERE IS TO
28 TAKE THE RESULTS OF BIOMEDICAL
1653
1 RESEARCH CONDUCTED BY THE ARMY. WE DO
2 A LOT OF WORK ON DRUGS AND VACCINES
3 AGAINST INFECTIOUS DISEASES SUCH AS
4 MALARIA, THINGS THE SOLDIERS WOULD BE
5 EXPOSED TO IF THEY WERE FIELDED AND WE
6 TRY AND DEVELOP THOSE TO ACTUAL
7 PRODUCTS, EITHER WITH A COMMERCIAL
8 PARTNER WHO MIGHT MAKE THESE FOR US OR
9 FINDING SOMEONE WHO WE CAN PARTNER
10 WITH AND CONTINUE THEIR DEVELOPMENT SO
11 THAT WE GET PRODUCTS THAT THE SOLDIERS
12 CAN USE WHEN THEY DEPLOY.
13 "Q OKAY. NOW, IN TERMS
14 OF HOW YOU DESCRIBE YOUR SCIENTIFIC
15 EXPERTISE ON YOUR CURRICULUM VITAE,
16 ONE FIELD IS BEHAVIOR PHARMACOLOGY?
17 "A CORRECT.
18 "Q AND THAT'S, EXACTLY,
19 WHAT?
20 "A THE STUDY OF HOW
21 DRUGS ALTER BEHAVIOR, VERY SIMPLY, HOW
22 DRUGS ALTER BEHAVIOR BY CHANGING
23 FUNCTIONS IN THE BRAIN, CHEMISTRY IN
24 THE BRAIN, AND HOW THAT IS TRANSLATED
25 INTO THE BEHAVIOR OF THE ANIMAL.
26 "Q WELL, FOR EXAMPLE,
27 WHEN YOU STUDY RATS OR MONKEYS, HOW
28 DRUGS ALTER THE BEHAVIOR OF RATS OR
1654
1 MONKEYS, WHAT CONCLUSIONS DOES THAT
2 KIND OF RESEARCH ALLOW YOU TO REACH IN
3 TERMS OF HUMAN BEHAVIOR?
4 "A WELL, ANIMALS
5 CERTAINLY SERVE AS A VERY VALID MODEL
6 FOR STUDYING THE EFFECTS OF DRUGS ON
7 BEHAVIOR. THERE'S NO DRUG DEVELOPMENT
8 THAT GOES ON. WHETHER IT IS
9 BEHAVIORAL DRUGS, THE KIND I STUDIED,
10 OR OTHER DRUGS, ANTIBIOTICS THAT ARE
11 NOT FIRST RUN IN ANIMAL TESTS. IN MY
12 EARLIER WORK, THERE ARE CERTAIN OTHER
13 ANIMAL TESTS THAT ARE DESIGNED TO
14 MIMIC OR IDENTIFY DRUGS YOU MIGHT USE
15 TO TREAT PSYCHIATRIC DISEASES.
16 "WE HAVE ANIMAL TESTS THAT
17 IDENTIFY THE ANXIOLYTIC DRUGS TO TREAT
18 PSYCHOSIS, DEPRESSION.
19 "SO THESE ANIMAL MODELS ARE
20 A STEP ALONG THE WAY IN DEVELOPING
21 DRUGS THAT WOULD BE USED IN PEOPLE.
22 "Q NOW WE HAVE ALSO
23 LEARNED THAT WHATEVER FIELD A
24 PROFESSIONAL IS IN, WHETHER HE'S AN

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

25 M.D. OR PH.D., THERE ARE CERTAIN
26 PROFESSIONAL JOURNALS WHICH ARE OF
27 PARTICULAR INTEREST TO SPECIALISTS IN
28 PARTICULAR FIELDS.
1655
1 "A UH-HUH.
2 "Q YOU ARE A REVIEWER
3 FOR A JOURNAL CALLED "PHARMACOLOGY,
4 BIOCHEMISTRY AND BEHAVIOR," JUST TELL
5 US, IN A GENERAL WAY, THE KINDS OF
6 SCIENTISTS THAT WOULD SUBSCRIBE TO
7 THAT PUBLICATION AND WHAT THE
8 PUBLICATION DEALS WITH USUALLY.
9 "A THAT'S A VERY BROAD
10 JOURNAL, AS IT'S TITLE IMPLIES,
11 BECAUSE IT COVERS THREE BIG AREAS;
12 BEHAVIOR, PHARMACOLOGY AND
13 BIOCHEMISTRY. AND IN GENERAL, IT
14 REPORTS ON THE EFFECTS OF ANIMAL OR
15 HUMAN RESEARCH. OR ANIMALS OR HUMANS
16 MAY BE GIVEN A DRUG AND THE INTEREST
17 IS TO SEE WHAT THAT DRUG DOES, WHETHER
18 IT IMPROVES LEARNING, SUCH AS STUDIES
19 AGAINST ALZHEIMER'S DISEASE, HOW IT
20 EFFECTS BRAIN ACTIVITY THAT THEN MIGHT
21 BE TRANSLATED INTO A BEHAVIORAL
22 CHANGE.
23 "IT WOULD STUDY A LOT OF
24 DRUG ABUSE LITERATURE, WHAT DRUGS ARE
25 ABUSED, HOW THEY ARE ABUSED, HOW WE
26 CAN TREAT THAT DRUG ABUSE.
27 "Q NOW IN TERMS OF
28 PROFESSIONAL ORGANIZATIONS, JUST TO
1656
1 MENTION TWO, YOU ARE A MEMBER OF THE
2 BEHAVIOURAL PHARMACOLOGY SOCIETY, AS
3 WELL AS THE BEHAVIOURAL TOXICOLOGY
4 SOCIETY?
5 "A CORRECT.
6 "Q I AM GOING TO ASK
7 YOU SPECIFICALLY ABOUT A FEW OF YOUR
8 PUBLICATIONS. AND I NOTICE THAT WITH
9 SEVERAL OF YOUR PUBLICATIONS, YOU HAVE
10 HAD ONE OR MORE CO-AUTHORS AND IN
11 SEVERAL OF THESE PUBLICATIONS, YOU
12 LIST SOMEONE NAMED "DENOBLE"
13 "A CORRECT.
14 "Q WHO IS THAT?
15 "A DR. VICTOR DENOBLE,
16 HE WAS MY SUPERVISOR, MY IMMEDIATE
17 SUPERVISOR WHILE I WORKED AT PHILIP
18 MORRIS.
19 "Q HE HAD A PH.D. IN
20 WHAT FIELD, SAME AS YOU OR DIFFERENT?
21 "A IN THE SAME FIELD.
22 WE ACTUALLY CAME FROM THE SAME
23 GRADUATE SCHOOL. SO HE ALSO WAS AN
24 EXPERIMENTAL PSYCHOLOGIST WITH A
25 BEHAVIORAL PHARMACOLOGY BACKGROUND.
26 AND HE WENT AND RECEIVED ADDITIONAL
27 TRAINING IN THE DRUG ABUSE FIELD PRIOR
28 TO COMING TO PHILIP MORRIS.
1657

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://www.industrydocuments.ucsf.edu/docs/yrhd0001

"Q NOW, THE ARTICLES
THAT YOU AUTHORED WITH DR. DENOBLE,
WERE ALL OF THEM SPECIFICALLY RELATED
TO YOUR WORK DURING THE PERIOD OF TIME
YOU WERE EMPLOYED AT PHILIP MORRIS?
"A I BELIEVE SO, YES.
"Q LET ME ASK YOU
ABOUT --
"A I WOULD HAVE TO READ
THE TITLES.
"Q I WILL. THAT'S
EXACTLY WHAT I AM GOING TO DO.
THERE IS ONE ARTICLE BY YOU
AND DR. DENOBLE, "INTRAVENOUS
SELF-ADMINISTRATION OF PHENOBARBITAL
AND ETHANOL IN RATS. WHAT WAS THE
THRUST OF THAT ARTICLE ABOUT?
"A THAT STUDY ALSO WAS
CONDUCTED WITH OUR COLLEAGUES AT
VIRGINIA COMMONWEALTH UNIVERSITY. IT
EXAMINED THE EFFECTS OF RATS,
SELF-ADMINISTERING OR WORKING FOR
PHENOBARBITAL ALONE AND ALCOHOL ALONE,
AND THEN WE PUT THE TWO DRUGS TOGETHER
TO SEE HOW THAT WOULD EFFECT THE RATS
SELF-ADMINISTRATION OR HOW HARD THE
RAT WOULD WORK TO OBTAIN THAT.
"WE FOUND OUT, WHAT WE FOUND
1658
OUT IS THAT CLEARLY THE RATS DO WORK
HARD TO MAINTAIN PHENOBARBITAL AS
INJECTED DIRECTLY INTO ITS VEINS AND
WHEN YOU ADD ALCOHOL TO IT, THEY WORK
EVEN HARDER.
"THE TWO DRUGS TOGETHER ARE
MORE POWERFUL THAN EITHER DRUG ALONE.
"Q THE CONCEPT OF
SELF-ADMINISTRATION, WHEN YOU ARE
TALKING ABOUT RATS, HOW DO YOU USE
THE -- HOW DO RATS SELF-ADMINISTER TO
THEMSELVES A GIVEN DRUG OR MEDICATION?
"A THERE ARE SEVERAL
WAYS YOU CAN DO IT. THE WAY WE DID
IT, YOU ACTUALLY IMPLANT A CATHETER, A
SMALL TUBE INTO THE VEIN OF A RAT. IT
LIES IN JUST ABOVE HIS HEART. IT
COMES OUT ABOVE THE BACK. IT TRAVELS
UNDER THE SKIN. IT'S A SURGICAL
PROCEDURE, RELATIVELY SIMPLE TO DO.
THEY ARE SEWN UP. THEY HEAL VERY
QUICKLY. AND THE ANIMAL IS PLACED IN
A BOX. HE LIVES IN A SMALL
EXPERIMENTAL CHAMBER. AND EVERY TIME
HE PRESSES A LEVER, HE GETS A SMALL
SQUIRT OR DOSE OF THE DRUG IN A
BOTTLE.
"NOW, THAT'S A VERY STANDARD
1659
PROCEDURE FOR STUDYING INTRAVENOUS
SELF-ADMINISTRATION IN AN ANIMAL, VERY
RELIABLE, WELL CHARACTERIZED.
"Q DOES THE RAT KNOW
HOW TO PRESS THE LEVER? HOW DOES THE

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

6 RAT KNOW, AT LEAST IN THE FIRST
7 INSTANT?
8 "A AGAIN, THERE ARE
9 SEVERAL WAYS YOU CAN DO IT. THE WAY
10 WE LIKE TO DO IT, RATS LEARN TO PRESS
11 LEVERS FOR DRUGS VERY QUICKLY IF IT IS
12 THE RIGHT DRUG. IF YOU HAVE A DRUG
13 SUCH AS COCAINE, WITHIN A FEW MINUTES
14 OR A FEW DAYS, JUST BY BEING IN THE
15 BOX, THE RATS ARE VERY ACTIVE, THEY
16 MOVE AROUND, THEY EXPLORE, THEY WILL
17 COME INTO CONTACT WITH THE LEVER. BY
18 CHANCE, THEY WILL PRESS IT DOWN. THEY
19 WILL GET THEIR INFUSION OF NICOTINE OR
20 COCAINE OR VARIETY OF OTHER DRUGS.
21 "THAT ASSOCIATION IS CREATED
22 VERY QUICKLY WHERE, I DON'T KNOW WHAT
23 A RAT SAYS TO ITSELF, BUT THE
24 ASSOCIATION --
25 "Q IF ANYTHING?
26 "A IF ANYTHING. BUT
27 PRESSING A LEVER, DRUG INJECTION THAT
28 HAPPENS VERY QUICKLY AND THE RAT IS
1660
1 OFF AND RUNNING.
2 "Q OKAY. ANOTHER
3 ARTICLE BY YOU AND DR. DENOBLE, THIS
4 ONE WAS IN 1986, "BRAIN SITES INVOLVED
5 IN THE BEHAVIORAL EFFECTS OF
6 INTRAVENTRICULARLY ADMINISTERED
7 NICOTINE," WHAT WAS THE THRUST OF
8 THAT?
9 "A THAT WAS A STUDY
10 OF -- MUCH OF OUR WORK AT PHILIP
11 MORRIS WAS DESIGNED TO TRY AND LOCATE
12 WHERE IN THE BRAIN NICOTINE WAS
13 CAUSING THE EFFECTS. AND WHAT WE WERE
14 DOING THERE IS PUTTING SMALL
15 QUANTITIES OF NICOTINE IN THE
16 SOLUTION, IN THE DIFFERENT PARTS OF
17 THE BRAIN, AND OBSERVING THE EFFECTS
18 ON THE RAT. AND WHAT WE WERE ABLE TO
19 DO IS MAP OUT DIFFERENT AREAS TO SEE
20 WHICH EFFECTS WERE PARTICULARLY
21 SENSITIVE TO NICOTINE INJECTIONS AND
22 WHICH ONES WERE NOT SENSITIVE.
23 "SO ULTIMATELY I -- IT
24 IDENTIFIED CERTAIN SMALL AREAS IN THE
25 BRAIN WHERE NICOTINE WAS ACTING.
26 "Q THEN THERE WAS AN
27 ARTICLE THAT YOU DID WITH DR. DENOBLE,
28 "DEVELOPMENT OF BEHAVIOURAL TOLERANCE
1661
1 FOLLOWING CHRONIC NICOTINE
2 ADMINISTRATION." AND MY QUESTION TO
3 YOU IS, HOW DO YOU USE THE TERM
4 "BEHAVIOURAL TOLERANCE" IN THIS
5 CONTEXT WHEN APPLIED TO RATS?
6 "A OKAY. THAT WAS A
7 VERY COMPLICATED STUDY. BUT
8 BASICALLY, TOLERANCE IS A
9 CHARACTERISTIC OF ALL DRUGS OF ABUSE,
10 WHETHER IT IS COCAINE OR HEROIN OR

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://www.industrydocuments.ucsf.edu/docs/yrhd0001

11 MORPHINE OR ALCOHOL OR AMPHETAMINE OR
12 NICOTINE, THEY ALL SHOW TOLERANCE.
13 "WHAT IS TOLERANCE?
14 TOLERANCE, ESSENTIALLY OCCURS WHEN YOU
15 GIVE A DRUG AND YOU PRODUCE AN EFFECT
16 ON BEHAVIOR OR ON THE CARDIOVASCULAR
17 SYSTEM OR ON SOME OTHER BIOCHEMICAL
18 MEASURE. YOU GIVE A DRUG, YOU PRODUCE
19 AN EFFECT. AND THEN YOU GIVE THAT
20 DRUG REPEATEDLY, TYPICALLY, EVERY DAY
21 FOR A PERIOD OF TIME.
22 "WHAT YOU FIND IS THAT
23 EFFECT WILL LESSEN, WILL GO AWAY, AND
24 IF TOLERANCE IS COMPLETE, YOU CAN NO
25 LONGER GET THE EFFECT.
26 "SO OVER REPEATED EXPOSURE
27 TO THAT DRUG, THE DRUG IS NO LONGER
28 PRODUCING THE EFFECT YOU SAW
1662
1 INITIALLY. AND WHAT YOU HAVE TO DO
2 THEN, TO RECOVER THE EFFECT, IS
3 TYPICALLY GIVE A MUCH HIGHER DOSE.
4 "THAT DEFINES TOLERANCE AND,
5 AGAIN, THAT'S A CHARACTERISTIC OF DRUG
6 ABUSE, ONE OF THE DEFINING
7 CHARACTERISTICS.
8 "THERE ARE A LOT OF WAYS FOR
9 TOLERANCE TO OCCUR.
10 "WHEN YOU GIVE A DRUG, YOU
11 ARE ALTERING THE BODY AND THE BODY
12 DOESN'T LIKE THAT.
13 "WHAT THE BODY WANTS TO DO
14 IS RETURN TO ITS NORMAL STATE. ITS
15 NATURAL STATE.
16 "THE BODY IS GOING TO TRY
17 AND COUNTERACT THE EFFECTS OF THE DRUG
18 IN MANY CASES AND IT COULD DO THIS IN
19 SEVERAL WAYS. ONE THING THE BODY CAN
20 DO IS JUST TRY TO GET THE DRUG OUT OF
21 THE BODY FASTER TO FLUSH IT OUT,
22 METABOLIZE IT FASTER.
23 "SO AS IT SEES THE DRUG
24 EVERY DAY, AS YOU WILL DO THOSE DAILY
25 INJECTIONS, ONE POSSIBILITY IS THE
26 METABOLISM WILL INCREASE AND REMOVE
27 THE DRUG FROM THE BODY QUICKER.
28 "ANOTHER POSSIBILITY WHICH
1663
1 WE ARE PARTICULARLY INTERESTED IN WITH
2 BEHAVIORAL TOLERANCE IS THAT THE BRAIN
3 WILL ALSO TRY AND COMPENSATE FOR
4 SEEING THAT DRUG THERE ON A REGULAR
5 BASIS, AND THE BRAIN CAN ALTER ITSELF
6 IN SEVERAL WAYS. IT CAN CHANGE THE
7 AREAS IN THE BRAIN THAT WILL, WHERE
8 THE DRUG LATCHES ONTO, WHERE THE DRUG
9 CONNECTS.
10 "OTHER AREAS IN THE BRAIN
11 CAN BECOME MORE COUNTERACTIVE TO
12 COUNTERACT THE EFFECTS OF THE DRUG.
13 BASICALLY, THE BRAIN IS GOING TO TRY
14 TO COUNTERACT OR COMPENSATE FOR THE
15 EFFECT OF THE DRUG BEING THERE.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://www.industrydocuments.ucsf.edu/docs/yrhd0001

"ONE WAY WE MEASURE THESE CHANGES IN THE BRAIN IS BY MEASURING BEHAVIORAL CHARACTERISTICS, WHAT WE MEASURE DIFFERENT BEHAVIORS OF THE RAT.
"IF YOU BELIEVE BEHAVIOR IS CONTROLLED BY THE BRAIN, AND THAT'S FAIRLY COMMON, YOU CAN GET AN IDEA OF BRAIN CHANGES BY MEASURING BEHAVIOR.
"SO WE CONDUCT A STUDY THAT MEASURED BOTH TYPES OF TOLERANCE I MENTIONED.
"ONE, TO MEASURE CHANGES IN

1664

BEHAVIOR AND ONE TO MEASURE CHANGES IN HOW THE BODY TRIES TO ELIMINATE THE DRUG THAT IT SEES ON A REGULAR BASIS.
"Q OKAY. NOW, LET ME FOCUS IN ON YOUR -- THE PERIOD OF TIME THAT YOU WERE ACTUALLY EMPLOYED AT PHILIP MORRIS.
"I BELIEVE YOU SAID YOU WENT TO WORK THERE IN NOVEMBER OF '81
"A CORRECT.
"Q AND YOU LEFT PHILIP MORRIS IN DECEMBER OF '84?
"A CORRECT.
"Q ONES YOU WERE HIRED, IN SCIENTIFIC TERMS, IN YOUR TERMS, YOU WERE A LABORATORY?
"A CORRECT.
"Q AND YOU WOULD DESCRIBE IT AS BEHAVIORAL PHARMACOLOGY LABORATORY?
"A CORRECT, RIGHT.
"Q SO AGAIN, IN PRACTICAL TERMS, WHAT WAS IN THE LABORATORY?
"A THIS WAS OUR STANDARD RAT LAB. I MEAN, IT HAD A SERIES OF -- IT WAS A WELL-EQUIPPED LAB. PHILIP MORRIS CERTAINLY WAS

1665

WILLING TO SUPPORT THAT TYPE OF RESEARCH. IT HAD APPROXIMATELY A DOZEN OR 15 EXPERIMENTAL CHAMBERS, 50 TO 100 RATS AT ANY GIVEN TIME, AN EXPENSIVE AND COMPLEX SERIES OF CONTROL EQUIPMENT. THE STUDIES WE RUN ALL CONTROLLED AUTOMATICALLY. NOW THEY ARE RUN BY COMPUTERS.
"BACK THEN COMPUTERS WERE JUST COMING TO THE LABS WHERE, BASICALLY, YOU HAVE A SERIES OF SWITCHES AND ELECTRICAL COMPONENTS THAT CONTROL WHAT GOES ON IN THE EXPERIMENTAL CHAMBER.
"THEY CAN COUNT EVERY TIME A RAT PRESSES A LEVER. THEY CAN PRESENT DIFFERENT STIMULI TO RATS, LEVELS AND TONES AND THEY CAN DELIVER FOOD PELLETS TO RATS.
"SO IT WAS A BASIC RAT LAB

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

21 USED FOR STUDYING ANIMAL MODELS AND
22 DRUGS.
23 "Q NOW, PHILIP MORRIS,
24 FROM OUTSIDERS' STANDPOINT, PHILIP
25 MORRIS IS OBVIOUSLY IN THE BUSINESS OF
26 MANUFACTURING CIGARETTES.
27 "A CORRECT.
28 "Q AND THEY HAVE GOT
1666
1 THIS RAT LAB.
2 "A RIGHT
3 "Q AND THEY HAVE GOT
4 SCIENTISTS LIKE YOU WORKING IN A RAT
5 LAB.
6 "A RIGHT.
7 "Q WHY? WHAT'S THE
8 POINT?
9 "A THE PURPOSE OF THE
10 LAB -- WELL, THE PURPOSE OF THE LAB
11 WAS TO STUDY THE BEHAVIORAL
12 PHARMACOLOGY OF NICOTINE AND OTHER
13 SMOKE COMPONENTS. THERE WERE REALLY
14 TWO MAIN GOALS. ONE WAS TO IDENTIFY,
15 WORKING IN CONTACT WITH OTHER PHILIP
16 MORRIS SCIENTISTS, A SUBSTITUTE FOR
17 NICOTINE, SOMETHING THAT WE CALLED A
18 NICOTINE ANALOG. IT WOULD BE A
19 MOLECULE THAT MIGHT BE RELATED TO
20 NICOTINE BUT ALTERED IN SOME WAY. IT
21 WAS OUR, OUR PRIMARY JOB WAS TO STUDY
22 AND EVALUATE THESE VARIOUS ANALOGS
23 CREATED BY PHILIP MORRIS AND SEE IF WE
24 COULD IDENTIFY ONE THAT HAD TWO
25 CHARACTERISTICS.
26 "ONE, THEY WANTED TO
27 ELIMINATE ONE OF THE NEGATIVE OR
28 ADVERSE EFFECTS OF NICOTINE AND THAT
1667
1 REFERRED TO THE CARDIOVASCULAR
2 EFFECTS.
3 "BACK IN THE EARLY '80'S,
4 THERE WAS GREAT CONCERN OVER THE HEART
5 RATE AND BLOOD PRESSURE EFFECTS OF
6 NICOTINE AND THE COMPANY WAS
7 INTERESTED IN TRYING TO ELIMINATE
8 THOSE EFFECTS. AT THIS SAME TIME, AT
9 PHILIP MORRIS, IT WAS WELL UNDERSTOOD
10 THAT NICOTINE WAS THE ACTIVE COMPONENT
11 IN CIGARETTE SMOKE THAT MAINTAINED
12 SMOKING BEHAVIOR.
13 MR. PIUZE: GO DOWN TO 21.
14 "A AND IT WAS WELL
15 UNDERSTOOD THAT NICOTINE WAS THE
16 ACTIVE COMPONENT IN TOBACCO THAT KEPT
17 PEOPLE SMOKING. AND THE GOAL WAS TO
18 GET A SUBSTITUTE NICOTINE IN THERE,
19 AGAIN, THAT WOULD MAINTAIN SMOKING BUT
20 WOULD NOT HAVE THIS NEGATIVE EFFECT ON
21 THE HEART AND WE HAD OUR ANIMAL MODELS
22 TO TRY AND SCREEN NUMBERS OF
23 COMPONENTS, COMPOUNDS, AND SEE IF WE
24 COULD IDENTIFY ONE THAT MET THOSE
25 CRITERIA.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by Arcadia https://industrydocuments.ucsf.edu/docs/yrhd0001

26 "Q IN TERMS OF THE
27 SUBSTITUTE FOR THE ANALOG FOR
28 NICOTINE, WAS ONE OF THE CRITERIA THAT
1668
1 YOU AND THE OTHER SCIENTISTS WERE
2 SEARCHING FOR WAS A SUBSTITUTE WHICH
3 WOULD HAVE SOME KIND OF IMPACT ON THE
4 BRAIN?
5 "A YES. IT WAS
6 CERTAINLY WELL KNOWN THAT NICOTINE
7 ACTED ON THE BRAIN. WE HAD A VERY
8 EMINENT RESEARCHER, A COLLEAGUE AT THE
9 UNIVERSITY OF ROCHESTER NAMED LEO
10 ABOOD WHO BASICALLY HAD SPENT HIS
11 WHOLE CAREER ON HOW NICOTINE BINDS OR
12 LATCHES ON TO THE NERVOUS TISSUE,
13 TISSUES SUCH AS IN THE BRAIN. AND HE
14 DID MANY OF THOSE ACTUAL BINDING
15 STUDIES FOR US. HE LOOKED TO SEE
16 WHERE IN THE BRAIN NICOTINE AND
17 ANALOGS WOULD BIND.
18 "ONE OF THE CRITERIA WAS
19 THAT IT LOOKED LIKE NICOTINE, IN TERMS
20 OF WHERE IN THE BRAIN IT WOULD BIND
21 AND THE TYPE OF EFFECTS IN BRAIN
22 TISSUE IT PRODUCED. AND THAT WAS JUST
23 PART OF THE PROGRAM THAT IT ACTED IN
24 THE BRAIN AND MAINTAINED BEHAVIOR IN
25 THE RATS SIMILAR TO NICOTINE.
26 "Q NOW, WHEN YOU ARE
27 OBSERVING THESE RATS AND THEY ARE
28 INVOLVED IN THIS WHOLE EXERCISE OF
1669
1 SELF-ADMINISTRATION, IS IT THE KIND OF
2 SET UP WHERE 20 OR 40 RATS ARE
3 TOGETHER OR IS IT INDIVIDUALIZED?
4 "A EACH RAT HAS ITS OWN
5 EXPERIMENTAL CHAMBER. IT'S A SMALL
6 BOX ABOUT THIS BIG. IT'S MADE OUT OF
7 ALUMINUM SHEET AND PLASTIC --
8 PLEXIGLAS SO IT IS EASY TO CLEAN. YOU
9 CAN OBSERVE THE RAT THROUGH THE
10 PLASTIC DOOR.
11 HE HAS A GRID PAN AND DROP
12 PAN. THESE ARE PRETTY EXPENSIVE.
13 BUT IT IS BASICALLY A METAL
14 AND PLASTIC BOX WITH LEVERS AND LIGHTS
15 AND SPEAKERS FOR PRESENTING TONES AND
16 A LITTLE FEEDER THAT AUTOMATICALLY
17 WILL PRESENT FOOD PELLETS AND THEN A
18 SERIES OF WIRES THAT GO OUT INTO
19 ANOTHER ROOM AND ARE CONNECTED TO THE
20 CONTROL EQUIPMENT TO BASICALLY
21 INTERACT WITH THE RAT SO THAT THEY
22 LIVE IN THESE BOXES 24 HOURS A DAY.
23 AT LEAST IN THE SELF-ADMINISTRATION
24 STUDIES. AND WE WOULD OBSERVE THEM TO
25 CLEAN AND FEED AS NEEDED.
26 MR. PIUZE: EXCUSE ME, WHERE ARE WE?
27 MR. GOLDSTEIN: 732, LINE 25.
28 "Q NOW, THE CATHETER
1670
1 THAT YOU DESCRIBED, WHEREBY THE RAT

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

GETS THE INFUSION OF THE NICOTINE, IS THAT SOMETHING THAT'S PERMANENTLY IMPLANTED INTO THE RAT'S BODY?
"A YES, YES. WE DO THE SURGERY. DR. DENOBLE, MY COLLEAGUE, WAS VERY GOOD AT DOING THIS. IT'S VERY TRICKY. RATS HAVE VERY SMALL VEINS. IT'S VERY HARD TO EVEN GET A VERY SMALL PLASTIC TUBE INTO A VEIN. YOU SUTURE IT. YOU GLUE IT USING, AGAIN, STANDARD INSTRUMENTS AS ANY SURGEON WOULD DO. AND ONCE A CATHETER IS IN PLACE AND THE RAT HAS HAD A FEW DAYS TO HEAL, THOSE CATHETERS CAN LAST ANYWHERE FROM WEEKS TO MONTHS. SO THESE WERE CHRONIC PREPARATIONS. THE RATS CERTAINLY, ONCE IMPLANTED, WERE USED FOR STUDIES FOR LONG PERIODS OF TIME.
"Q NOW, IN TERMS OF THE SELF-ADMINISTRATION STUDIES, IN TERMS OF FOOD OR WATER, DID THE RATS HAVE TO PRESS A LEVER TO GET FOOD AND WATER OR WAS WATER SUPPLIED TO THEM?
"A WE HAD A VARIETY OF TYPES OF STUDIES, DEPENDING UPON WHAT WE WERE DOING. AND THE BASIC

1671

SELF-ADMINISTRATION PROCEDURE, WHERE THE ANIMAL IS PRESSING A LEVER TO OBTAIN A SQUIRT OF NICOTINE SOLUTION INTO HIS VEINS. WE WOULD FEED THOSE ANIMALS TWICE A DAY. WE WOULD SIMPLY GIVE THEM A FEW FOOD PELLETS IN THE MORNING AND THE EVENING AND THEY ALWAYS HAD A WATER BOTTLE SO THERE WAS PLENTY OF WATER TO DRINK. IT WAS A NICE WARM -- THEY WERE VERY COMFORTABLE AND THEIR JOB WAS TO PRESS THE LEVER FOR NICOTINE. IN OTHER STUDIES WE HAD RATS SIMPLY WORKING FOR FOOD PELLETS. THERE WAS NO CATHETER, NO I. V. ADMINISTRATION OF DRUGS. BUT WE WOULD TRAIN THESE ANIMALS TO PERFORM CERTAIN -- TO PERFORM TASKS, REWARD THEM WITH FOOD PELLETS AND THEN LOOK AND SEE HOW NICOTINE OR ANALOGS OR OTHER ITEMS OF INTEREST WOULD MODIFY THAT BEHAVIOR.
AND THERE WERE STUDIES WHERE THE RATS HAD A CHOICE TO PRESS A LEVER FOR FOOD OR NICOTINE. SO THEY GOT TO DO BOTH AND THEY WERE VERY GOOD AT IT.
"Q AND THE RAT WAS INTELLIGENT ENOUGH, IF THEY WANT FOOD, THEY PRESS THE RIGHT LEVER FOR FOOD?

1672

"A RATS ARE PRETTY SMART. THEY LEARN QUICKLY. WHEN THEY ARE HUNGRY, THEY LEARN WHERE TO GO FOR THE FOOD. WHEN THEY WANT AN INFUSION OF NICOTINE, THEY LEARN WHERE TO GO FOR THAT.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

"IN MOST STUDIES WE WOULD GIVE THEM DIFFERENT OPPORTUNITIES DURING THE DAY WHEN THEY COULD GET ONE OR THE OTHER. AND WE COULD OFTEN SIGNIFY THAT WITH A LIGHT OR TONE.
"SO THEY LEARNED PRETTY QUICKLY WHAT THEY HAD TO DO TO GET WHAT THEY NEED.
"Q SO, AGAIN, IF YOU WERE, YOU KNOW, LIKE WITH A FRIEND OF YOURS WHO WAS NOT A SCIENTIST, AND YOU EXPLAINED GENERALLY YOUR KIND OF WORK, WHAT YOU WERE LEARNING OF VALUE TO PHILIP MORRIS AND TO YOURSELF, AS A SCIENTIST IN TERMS OF THESE SELF-ADMINISTRATION?
"A WELL, AGAIN, SELF-ADMINISTRATION WAS THE BEDROCK OF THE LAB. THAT WAS DR. DENOBLE'S PARTICULAR SPECIALTY, THAT'S WHY HE CAME IN, TO SET THAT UP.
"A POINT ABOUT
1673
SELF-ADMINISTRATION IS IF A RAT WILL SELF-ADMINISTER A DRUG, A HUMAN WILL SELF-ADMINISTER A DRUG. THAT'S A VERY GOOD PREDICTIVE MODEL. RATS ARE VERY -- THERE ARE DRUGS HUMANS WILL SELF-ADMINISTER THAT RATS WON'T LIKE L.S.D. RATS DON'T LIKE L.S.D. AND OTHER HALLUCINOGENICS, BUT IF YOU LOOK AT COCAINE, HEROIN, MORPHINE, AMPHETAMINE, PHENCYCLIDINE, P.C.P, ESSENTIALLY RATS WILL ADMINISTER ALL THESE DRUGS WITH THE EXCEPTION OF SOME I NOTED.
"SO A RAT IS A CONSERVATIVE MEASURE OF WHAT A HUMAN WILL DO. IF THE RAT WILL WORK FOR IT, THE HUMAN WILL WORK FOR IT.
"I AM NOT AWARE OF ONE DRUG THAT A RAT WILL WORK FOR THAT A HUMAN WILL NOT.
"Q SO ESSENTIALLY, WHAT KIND OF ACTUAL SCIENTIFIC DATA WERE YOU COLLECTING FROM THESE EXPERIMENTS AND THEN TELL US OF WHAT PRACTICAL USE THIS DATA WAS.
"A WELL, OUR JOB IS TO SET UP THIS SELF-ADMINISTRATION MODEL OF NICOTINE.
1674
"PHILIP MORRIS WANTED US TO BE ABLE TO FIND A CANDIDATE COMPOUND THAT WOULD SUBSTITUTE FOR NICOTINE. SO OUR GOAL WAS TO FIND, FIRST SET UP THE MODEL TO SHOW THAT RATS WILL SELF-ADMINISTER NICOTINE, INDICATING THAT IT HAS POSITIVELY REINFORCING EFFECTS. THE RATS WILL WORK FOR IT. AND ONCE THE RATS WERE DOING THAT AND TELLING US THAT THEY LIKE IT, IN QUOTES, I MEAN, WE WOULD THEN USE THAT

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://industrydocuments.ucsf.edu/docs/yrhd0001

12 AS A MODEL EVALUATE THESE NICOTINE
13 ANALOGS, THESE OTHER NICOTINE LIKE
14 COMPOUNDS THAT THE CHEMISTS AT PHILIP
15 MORRIS WERE SYNTHESIZING.
16 "WE HAD A LARGE GROUP OF,
17 VERY GOOD GROUP OF ORGANIC CHEMISTS.
18 WE, ESSENTIALLY, WERE FUNCTIONING AS A
19 DRUG COMPANY. WE HAD ORGANIC CHEMISTS
20 THAT WERE UPSTAIRS IN THE RESEARCH
21 CENTER MAKING NICOTINE ANALOGS.
22 "THEY WOULD SEND THEM DOWN
23 TO US FOR EVALUATION.
24 "IT WOULD GO OUT TO OTHER
25 LABS SUCH AS THE UNIVERSITY OF
26 ROCHESTER FOR EVALUATION.
27 "THE WHOLE PURPOSE BEING TO
28 IDENTIFY NICOTINE ANALOG THAT, AGAIN,
1675
1 MAINTAINED SELF-ADMINISTRATION IN THE
2 RATS AND ULTIMATELY, AS AN INDICATION
3 OF MAINTAINING SMOKING BEHAVIOR IN
4 PEOPLE, BUT DID NOT HAVE THESE
5 NEGATIVE CARDIOVASCULAR EFFECTS, DID
6 NOT HAVE THE EFFECTS OF INCREASING
7 HEART RATE OR INCREASING BLOOD
8 PRESSURE, WHICH WERE A CONCERN AT THE
9 TIME.
10 "Q NOW, WHEN YOU WERE
11 EMPLOYED AT PHILIP MORRIS DOING THE
12 KIND OF WORK THAT YOU DESCRIBED, IF
13 YOU WANTED TO BE TOTALLY UP TO DATE ON
14 WHETHER OTHER RESEARCHERS IN YOUR
15 FIELD OR SIMILAR FIELDS WERE DOING THE
16 SAME KIND OF RESEARCH, WHETHER IN NEW
17 YORK OR MICHIGAN OR IN EUROPE OR
18 ANYWHERE, HOW WOULD YOU GO ABOUT
19 FINDING THAT INFORMATION TO MAKE SURE
20 THAT YOU WERE CURRENT?
21 "A TWO BASIC WAYS, TO
22 READ THE LITERATURE. ALL GOOD AND
23 CURRENT SCIENTIFIC LITERATURE IS
24 ATTEMPTED OR AT LEAST YOU ATTEMPT TO
25 PUBLISH IT AND YOU ATTEND MEETINGS
26 WHERE YOU CAN PHYSICALLY MEET
27 FACE-TO-FACE WITH YOUR COLLEAGUES AND
28 EXCHANGE AND SHARE INFORMATION.
1676
1 "Q TO YOUR KNOWLEDGE,
2 WHILE YOU WERE AT PHILIP MORRIS, DID
3 THE PHILIP MORRIS SCIENTISTS MONITOR
4 THE WORLDWIDE LITERATURE RELATIVE TO
5 NICOTINE AND OTHER SMOKE COMPOUNDS?
6 "A WELL, WE CERTAINLY
7 MONITORED THE LITERATURE ON OUR OWN
8 AREA, THE PEOPLE IN THE BEHAVIORAL
9 RESEARCH UNIT, I THINK, WERE VERY
10 COMPETENT, UP TO DATE.
11 "IN ORDER TO KEEP YOUR
12 RESEARCH UP TO DATE AND FRESH AND
13 CURRENT, YOU HAVE TO KNOW WHAT OTHER
14 PEOPLE ARE DOING.
15 "AND IN GENERAL, THE PHILIP
16 MORRIS LIBRARY WAS VERY GOOD AT

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

17 BRINGING IN THE RECENT LITERATURE THAT
18 WOULD BE RELEVANT TO SMOKING, SMOKING
19 AND HEALTH, NICOTINE.
20 "AND WE ALSO HAD SOME PEOPLE
21 WORKING IN THE, WITH ONE OF OUR
22 DIRECTORS, DR. OSDENE, A WOMAN NAMED
23 JUDY JOHNS, SPENT A GOOD PART OF HER
24 TIME DOING LITERATURE SEARCHES TO FIND
25 OUT WHAT WAS BEING DONE AROUND THE
26 WORLD IN DIFFERENT LABORATORIES.
27 "Q NOW, YOU HAVE
28 MENTIONED, I GUESS, IN ANOTHER
1677
1 DEPARTMENT OF PHILIP MORRIS, THERE
2 WERE ORGANIC CHEMISTS AND THEIR FOCUS
3 WAS WHAT IN RELATION TO WHAT YOU WERE
4 DOING?
5 "A THE ORGANIC
6 CHEMIST'S MAIN JOB WAS TO CREATE
7 ANALOGS, A GOOD --
8 "Q SUBSTITUTE FOR
9 NICOTINE?
10 "A -- SUBSTITUTES FOR
11 NICOTINE. A GOOD ORGANIC CHEMIST CAN
12 MAKE A PARENT MOLECULE, SUCH AS A
13 NICOTINE MOLECULE AND THEN IN THEIR
14 TEST TUBES MANIPULATES THAT MOLECULE.
15 THEY CAN TAKE THINGS OFF, BEND IT AND
16 TWIST IT TO COME UP WITH A SECOND AND
17 A THIRD GENERATION COMPOUND. VERY
18 STANDARD TYPE OF PROCEDURE THAT ANY
19 ONE OF THE MAJOR DRUG COMPANIES WOULD
20 DO TO CREATE NEW DRUGS FOR THEIR USE.
21 "Q IN TERMS OF THE
22 LEVEL OF SOPHISTICATION AT PHILIP
23 MORRIS, SCIENTIFIC SOPHISTICATION IN
24 YOUR AREA ORGANIC CHEMISTRY, HOW WOULD
25 YOU RATE THEM?
26 "A I THINK PHILIP
27 MORRIS HAD A VERY TOPNOTCH RESEARCH
28 CENTER. BEING VERY MODEST, I MEAN, I
1678
1 THINK I WAS A COMPETENT RESEARCHER. I
2 LIKED WHAT I DID. I STUDIED HARD.
3 VIC DENOBLE, I THOUGHT, WAS AN
4 EXCELLENT RESEARCHER.
5 "Q DID PHILIP MORRIS,
6 IN YOUR DEPARTMENT AND OTHER
7 DEPARTMENTS YOU WERE FAMILIAR WITH ON
8 A FIRSTHAND BASIS, HAVE VERY
9 UP-TO-DATE MODERN SCIENTIFIC
10 EQUIPMENT?
11 "A WELL, OURS WAS
12 STATE-OF-THE-ART AT THE TIME, AND I
13 DON'T ORDER CHEMISTRY EQUIPMENT, BUT I
14 HAVE NO DOUBT THAT THEIRS WAS ALSO
15 STATE-OF-THE-ART.
16 "Q NOW, WERE THERE, IN
17 FACT, PERIODIC NICOTINE ANALOG
18 MEETINGS?
19 "A YES, THESE --
20 "Q AND YOU WOULD ATTEND
21 THESE MEETINGS?

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

"A CORRECT.
"Q HOW OFTEN WERE THEY
HELD, ABOUT?
"A THEY COULD BE ONCE A
MONTH, EVERY COUPLE OF WEEKS,
DEPENDING UPON HOW MUCH NEW DATA WAS
COLLECTED AND WHAT WAS THE ISSUES TO
1679
BE DISCUSSED. BUT MONTHLY, AT LEAST.
"Q AND WERE YOU ABLE,
BEFORE YOU LEFT PHILIP MORRIS, TO SAY
THAT OUR RESEARCH HAD PROVEN SUCH AND
SUCH OR ESTABLISHED SUCH AND SUCH?
"A WE EXAMINED A NUMBER
OF ANALOGS. WHAT WOULD HAPPEN IS THE
CHEMISTS SYNTHESIZED AN ANALOG, THEY
WOULD SEND IT DOWN TO US AND TO OTHER
PEOPLE FOR TESTING. SO OVER THE TWO
AND A HALF YEARS THAT I WAS IN THE LAB
THERE, WE TESTED PROBABLY CLOSE TO 100
OR MORE COMPOUNDS AND SEVERAL OF THESE
SEEMED TO MEET THE CRITERIA THAT
PHILIP MORRIS WANTED, IN THAT THE
ANALOGS MAINTAINED SELF-ADMINISTRATION
IN THE RATS IN AN AMOUNT EQUIVALENT TO
OR GREATER THAN NICOTINE. AND AS
REPORTED BY ONE OF OUR COLLEAGUES,
DR. ABOOD OF ROCHESTER HAD FEWER
CARDIOVASCULAR EFFECTS THAN NICOTINE.
SO THAT SEEMED TO BE THE COMPOUND OR
TWO CANDIDATES FOR COMPOUND THEY WERE
LOOKING FOR.
"Q WELL, IN TERMS OF
WAS THERE EVER AN ANALOG SELECTED THAT
WAS USED IN A COMMERCIAL CIGARETTE AS
A SUBSTITUTE FOR NICOTINE?
1680
"A THE --
"Q I AM TRYING TO FIND
OUT WHERE, IF ANYWHERE, THE RESEARCH
PART OF THE PROGRAM, THE ANALOGS WENT
INTO PRACTICAL TERMS.
"A AND THE TWO MOST
PROMISING COMPOUNDS, 2-PRIME METHYL
NICOTINE AND 4-PRIME METHYL NICOTINE,
WERE IDENTIFIED AND AGREEMENT UPON BY
THE ANALOG GROUP AS BEING THE MOST
PROMISING.
"OVER THESE MEETINGS, THERE
WAS A LOT OF DISCUSSION ON IF AND WHEN
WE IDENTIFIED ONE, WHAT ACTUALLY,
ACTUALLY WOULD WE DO WITH IT AND HOW
WOULD PHILIP MORRIS, HOW WOULD THEY
GET IT INTO A CIGARETTE.
"THERE WERE ISSUES OF
REGULATORY CONCERN WITH THE F.D.A.
WHEN THEY WOULD GET IT IN, WOULD THEY
PUT IT IN WITH NICOTINE AND TAKE
NICOTINE OUT GRADUALLY. THERE WERE A
LOT OF THESE ISSUES THAT CAME UP BUT I
AM NOT AWARE THAT THE ANALOG WAS
ACTUALLY EVER PUT INTO A COMMERCIAL
PRODUCT.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://www.industrydocuments.ucsf.edu/docs/yrhd0001

27 "Q NOW, DID THERE COME
28 A TIME WHEN THE LABORATORY WAS CLOSED?
1681
1 "A YES.
2 "Q SO DESCRIBE THE
3 EVENTS LEADING UP TO THAT, THE CLOSING
4 OF THE LABORATORY.
5 "A I GOT THERE IN
6 NOVEMBER OF 1981, THE LABORATORY WAS
7 CLOSED IN APRIL OF 1984. FOR THE
8 FIRST YEAR AND A HALF I WAS THERE,
9 WORK PROCEEDED RELATIVELY SMOOTHLY.
10 "I WOULD LIKE TO SAY THIS
11 WAS A VERY SENSITIVE LAB AT THE
12 RESEARCH CENTER, VERY SECRET. WE WERE
13 ALLOWED TO HAVE VERY FEW VISITORS.
14 WHEN WE ORDERED OUR RATS, THEY WERE
15 OFTEN WHEELED UP TO THE LAB ON A CART
16 UNDER A SHEET SO NOBODY COULD SEE
17 THEM.
18 "WE DID VERY FEW
19 PRESENTATIONS. IN FACT, FOR THE FIRST
20 YEAR, NO PRESENTATIONS TO THE RESEARCH
21 CENTER AS A WHOLE.
22 "OUR ANNUAL REPORTS HAD A
23 VERY RESTRICTED DISTRIBUTION.
24 "THE PEOPLE WE INTERACTED
25 WITH, FOR THE MOST PART, WERE DR. DUNN
26 AND THEN JIM CHARLES AND DR. THOMAS
27 OSDENE BEING THE CHAIN OF COMMAND THAT
28 OVERSAW OUR LABORATORY.
1682
1 "Q ALL RIGHT. AT SOME
2 POINT WHILE YOU WERE EMPLOYED AT
3 PHILIP MORRIS, THE RAT LABORATORY WAS
4 CLOSED; CORRECT?
5 "A CORRECT.
6 "Q AND OBVIOUSLY YOU
7 ASKED WHY THAT WAS HAPPENING?
8 "A CORRECT.
9 "Q WHAT WERE YOU TOLD,
10 WHO DID YOU ASK AND WHAT WERE YOU TOLD
11 AS TO WHY YOUR LABORATORY,
12 DR. DENOBLE'S LABORATORY, WAS BEING
13 CLOSED?
14 "A I WAS GIVEN THAT
15 INFORMATION IN APRIL OF '84 BY DR. JIM
16 CHARLES WHO WAS DR. DENOBLE'S
17 IMMEDIATE SUPERVISOR THAT THE LAB WAS
18 BEING CLOSED. WE WERE TOLD IT WAS A
19 BUSINESS DECISION. I WAS TOLD
20 DIRECTLY BY DR. CHARLES THE LAB WAS
21 BEING CLOSED.
22 "WHEN I ASKED WHY, I WAS
23 TOLD IT WAS A BUSINESS DECISION. THIS
24 WAS REALLY THE CULMINATION OF A SERIES
25 OF EVENTS FOR THE LAST SIX OR NINE
26 MONTHS WHERE THE LAB WAS IN QUESTION.
27 "THERE WERE, THERE WERE
28 SEVERAL TIMES IT CAME UP IN THE
1683
1 PREVIOUS SIX TO NINE MONTHS THAT THE
2 LAB MIGHT BE CLOSED. WE WERE FINALLY

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by Arcadia https://industrydocuments.ucsf.edu/docs/yrhd0001

3 TOLD IT WAS TO BE CLOSED, WERE TOLD
4 THE NEXT DAY, TURN OFF YOUR EQUIPMENT,
5 KILL YOUR RATS, PACK UP YOUR OFFICES
6 AND THAT'S WHAT WE DID.
7 "Q BASED ON THE PERIOD
8 OF TIME THAT YOU WORKED THERE IN THE
9 RAT LABORATORY, AND JIM CHARLES WAS
10 YOUR IMMEDIATE SUPERVISOR -- WELL,
11 DENOBLE WAS YOUR IMMEDIATE?
12 "A YEAH. I ANSWERED TO
13 DENOBLE, DENOBLE ANSWERED TO CHARLES.
14 "Q YOU KNOW, DR. MELE,
15 IN TERMS OF YOUR BEING TOLD THAT THE
16 LAB WAS CLOSED FOR BUSINESS REASONS,
17 LET ME ASK YOU THIS: FROM YOUR
18 STANDPOINT, WAS THERE ANY VALID
19 SCIENTIFIC REASON TO CLOSE THE LAB?
20 "A WE WERE NEVER GIVEN
21 ANY REASON, SCIENTIFICALLY, WHY THE
22 LAB SHOULD NOT CONTINUE. THERE WAS
23 NEVER ANYTHING BUT THE HIGHEST REGARD
24 FOR THE LAB AND THE WORK AT PHILIP
25 MORRIS.
26 "Q AT THE TIME THE LAB
27 WAS CLOSED IN APRIL OF '84, HAD YOU
28 COMPLETED YOUR RESEARCH?
1684
1 "A NO. WE HAD A NUMBER
2 OF PROJECTS ONGOING.
3 WE HAD COMPLETED SOME
4 STUDIES. WE WERE IN THE MIDDLE OF
5 OTHERS. AND WE WERE ABOUT TO START
6 YET ANOTHER SERIES, ONE STUDY OFTEN
7 LEADS TO ANOTHER.
8 "THERE ARE MANY QUESTIONS TO
9 BE ASKED.
10 "WE HAD IDENTIFIED TWO
11 CANDIDATE ANALOGS THAT THE COMPANY HAD
12 ASKED US TO LOOK FOR BUT THERE WERE
13 CLEARLY A NUMBER OF OTHER ISSUES THEY
14 ASKED US TO PURSUE AND THOSE ANSWERS
15 HAD NOT BEEN COMPLETED. THOSE STUDIES
16 WERE NOT FINISHED.
17 "Q DID YOU SAY THAT
18 DURING THE SIXTH OR NINE MONTHS
19 TIMEFRAME BEFORE THE LAB WAS ACTUALLY
20 CLOSED IN APRIL OF '84, THAT THE
21 PRESIDENT OF PHILIP MORRIS CAME DOWN
22 TO RICHMOND AND WENT THROUGH THE LAB?
23 "A THAT IS CORRECT.
24 MR. SHEP POLLOCK, HEAD OF PHILIP
25 MORRIS, U.S.A.
26 "Q DID HE COME ALONE?
27 "A HE CAME WITH A SMALL
28 ENTOURAGE, ONE OF THE CORPORATE
1685
1 ATTORNEYS, FRED NEWMAN, MR. FRED
2 NEWMAN, WHO WAS THE ATTORNEY IN OUR
3 CHAIN. HE VIEWED AND EVALUATED ALL OF
4 OUR WORK, OUR WRITTEN REPORTS, AND
5 THEN THERE WERE SEVERAL OTHER PEOPLE
6 FROM NEW YORK. I DON'T REMEMBER WHO.
7 "Q WHEN THE PRESIDENT

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

8 OF PHILIP MORRIS WAS IN THE
9 LABORATORY, DID YOU HAVE ANY DIRECT
10 DISCUSSION WITH HIM?
11 "A YES.
12 "Q TELL US WHAT HE SAID
13 TO YOU, WHAT YOU SAID TO HIM
14 "A MR. POLLOCK AND MR.
15 NEWMAN AND THE OTHER GROUPS HAD TOOK A
16 TOUR OF THE LAB. THEY WANTED TO SEE
17 THE RATS WORKING IN THE BOX. SO THEY
18 GOT TO SEE A RAT SELF-ADMINISTERING
19 NICOTINE. THE LAB IS COMPOSED OF A
20 SERIES OF ROOMS THAT ARE
21 INTERCONNECTED. WHEN WE WERE OUT IN
22 ONE OF THE MAIN ROOMS, I WAS THERE
23 WITH MR. POLLOCK AND SEVERAL OTHER
24 PEOPLE AND HE ASKED, HE ASKED, I DON'T
25 REMEMBER THE EXACT WORDS, EITHER, IS
26 NICOTINE OR IS CIGARETTE SMOKING
27 ADDICTING.
28 "Q DID YOU ANSWER HIM?
1686
1 "A AND THE ANSWER I
2 GAVE WAS THAT THERE WAS A LOT OF WORK
3 THAT NEEDED TO BE DONE TO ADDRESS THAT
4 QUESTION ON NICOTINE. WE HAD ANSWERED
5 SOME OF THE QUESTIONS FROM OUR WORK
6 WITH SELF-ADMINISTRATION IN OUR
7 TOLERANCE STUDIES. WE FELT WE NEEDED
8 TO DO MORE WORK. WE HAD OTHER WORK IN
9 PROGRESS AND WE FELT THE WORK NEEDED
10 TO CONTINUE TO ADDRESS THAT MORE
11 DIRECTLY.
12 MR. PIUZE: WHERE SHOULD I BE, MR.
13 GOLDSTEIN?
14 MR. GOLDSTEIN: I AM GOING TO SAY 770,
15 LINE 19.
16 MR. LE BERTHON: THAT'S BEEN RULED ON, GO
17 DOWN TO 771.
18 THE COURT: 8. CORRECT, COUNSEL?
19 MR. LE BERTHON: NO, I THINK IT'S 22 OR
20 25.
21 MR. PIUZE: OKAY. I WILL GO WITH THAT,
22 MR. LE BERTHON.
23 THE COURT: 25?
24 MR. PIUZE: THANK YOU, YOUR HONOR.
25 "Q DID THE PRESIDENT OF
26 PHILIP MORRIS ONLY PAY THAT ONE VISIT?
27 "A TO OUR LABORATORY?
28 "Q TO YOUR LABORATORY.
1687
1 "A TO OUR LABORATORY.
2 "Q NOW, WHEN THE
3 LABORATORY WAS FINALLY CLOSED, THAT
4 CAME OUT OF THE BLUE, I MEAN, I KNOW
5 THERE WERE EVENTS WHICH MADE YOU
6 RECOGNIZE THERE WAS A POSSIBILITY THAT
7 THE LABORATORY WOULD BE CLOSED, BUT ON
8 THAT PARTICULAR DAY, DID YOU HAVE ANY
9 WARNING THAT IT WAS GOING TO HAPPEN
10 THAT DAY?
11 "A OUR LIFE, FOR THE
12 LAST SEVERAL MONTHS THERE WAS A ROLLER

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

13 COASTER. WE WERE UP AND DOWN. BUT AT
14 THAT TIME AND FOR A PERIOD OF TIME
15 BEFORE THAT, A MONTH, TWO OR THREE, WE
16 HAD NO WARNING. WE WERE -- WE FELT WE
17 WERE GOOD TO GO.
18 "Q WHO TOLD YOU THE LAB,
19 WHO ACTUALLY WAS THE PERSON WHO SAID
20 YOU, 'YOUR WORK IS DONE, THE LAB'S
21 CLOSED'?
22 "A JIM CHARLES.
23 "Q AND YOU SAID 'WHY?'
24 AND HE SAID, 'IT IS A BUSINESS
25 DECISION'?
26 "A RIGHT.
27 "Q OKAY. FROM THE TIME
28 YOU GO TO PHILIP MORRIS UNTIL THE TIME
1688
1 YOU ARE TOLD THE LABORATORY IS CLOSED,
2 YOU ALWAYS WORKED IN A RAT LABORATORY?
3 "A CORRECT.
4 "Q THEN ON APRIL 5,
5 '84, YOU ARE TOLD THE RAT LABORATORY
6 IS GONE?
7 "A I WAS TOLD PHILIP
8 MORRIS DOES NOT DO BEHAVIORAL
9 PHARMACOLOGY ANYMORE."
10 MR. PIUZE: WHY DON'T YOU CONTINUE THE
11 ANSWER.
12 "A CLOSE THE LAB.
13 "Q SO WHAT HAPPENED TO
14 YOU?
15 "NO LABORATORY, SO WHAT
16 HAPPENED TO YOUR JOB?
17 "A WELL, WE WERE GIVEN
18 THREE OPTIONS AT THAT TIME. THEY
19 SAID, WE WILL PAY YOU FOR SIX MONTHS
20 AND LEAVE NOW, WALK AWAY, GOOD-BYE.
21 THEY SAID, WE COULD PLACE YOU
22 ELSEWHERE IN THE COMPANY IF YOU WANT,
23 OR THEY SAID, YOU COULD TAKE THE SIX
24 MONTHS AND WE WILL GIVE YOU HELP AND
25 YOU CAN GO OUT AND LOOK FOR ANOTHER
26 JOB FOR THE SIX MONTHS.
27 "THE OPTION --
28 "Q YOU WERE TOLD WHAT?
1689
1 "A WE WERE TOLD TO STOP
2 ASKING OR YOU MIGHT END UP SWEEPING
3 FLOORS IN THE FACTORY.
4 "SO WHAT HAPPENED WAS,
5 ULTIMATELY WE FOUND OTHER JOBS. AND
6 THE SIX-MONTH PERIOD FOR SCIENCE IS A
7 VERY DIFFICULT TIME. USUALLY PEOPLE
8 IN THE UNIVERSITY, WHEN -- IF SOMEONE
9 IS DENIED TENURE, FOR EXAMPLE, AND
10 THEY KNOW THEY ARE GOING TO BE LOOKING
11 FOR A JOB, THEY HAVE A YEAR, YEAR AND
12 A HALF TO SEARCH. WE HAD ON THE ORDER
13 OF SIX MONTHS. SO IT WAS A DIFFICULT
14 TIME.
15 "Q IN YOUR OWN MIND,
16 FROM YOUR STANDPOINT, IN TERMS OF HOW
17 YOU LEFT THE EMPLOYMENT OF PHILIP

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Tobacco Industry Documents Library at UCSF http://www.industrydocuments.ucsf.edu/docs/yrhd0001

MORRIS, DID YOU QUIT? WERE YOU FIRED?
"A WE WERE FIRED. WE
WERE -- I DON'T KNOW WHAT ELSE TO CALL
IT. WE WERE JUST FIRED AND TOLD TO
LEAVE.
"Q YOU WERE NEVER
OFFERED A SUBSTITUTE JOB?
"A NEVER.
"Q DID ANYONE EXPLAIN
TO YOU WHY THE LAB HAD TO BE CLOSED
LIKE THIS, WHY THE RATS HAD TO BE
1690
KILLED, SO QUICKLY?
"A NO.
"Q OKAY.
"A IN FACT, I WOULD
JUST SAY WE ASKED FOR ONE MORE DAY TO
FINISH ONE EXPERIMENT AND THAT WAS
DENIED.
"Q NOW, YOU KNOW, I
NOTICE, I NOTICE IN LOOKING AT YOUR
CURRICULUM VITAE THAT THERE IS A
SECTION WHICH SAYS, 'TECHNICAL
REPORTS, PROPRIETARY RESTRICTION,
PHILIP MORRIS, U.S.A., INC.' AND IT'S
REPORTS BY YOU AND DR. DENOBLE
RELATING TO NICOTINE ADMINISTRATION
WITH THE RATS.
"A RIGHT
"Q THESE ARE ARTICLES
YOU WROTE WHERE YOU WERE THINKING OR
YOU WERE THINKING ABOUT WRITING?
"A THOSE WERE TITLES OF
EXPERIMENTS WE RAN AT PHILIP MORRIS.
THOSE WERE PAPERS WE WOULD HAVE LIKED
TO HAVE PUBLISHED. WE WERE NOT
ALLOWED. I DON'T REMEMBER EXACTLY
WHICH ONES ARE THERE. WE WERE NOT
ALLOWED TO PUBLISHED THOSE STUDIES.
"WHEN YOU ARE SEARCHING FOR
1691
A JOB AND YOU HAVE BEEN SOMEWHERE FOR
THREE YEARS AS A SCIENTIST AND YOU
HAVE A THREE-YEAR BLOCK WITH NO
PUBLICATIONS, THAT CERTAINLY DOESN'T
MAKE YOU MORE EMPLOYABLE. SO WE
WORKED OUT WITH PHILIP MORRIS THAT WE
WANTED TO LET THE WORLD KNOW, TO HAVE
SOME INDICATION THAT WE WERE ACTIVELY
DOING RESEARCH WHILE WE WERE THERE,
EVEN THOUGH WE WERE NOT ABLE TO
PRODUCE ACTUAL PUBLISHED PAPERS
BECAUSE THEY WOULD NOT LET US PUBLISH
THE RESULTS.
"Q NOW, YOU LEFT THE
EMPLOY OF PHILIP MORRIS IN DECEMBER OF
'84, ALTHOUGH THE LABORATORY WAS
CLOSED IN APRIL OF '84.
"A RIGHT, CORRECT.
"Q FROM THE TIME YOU
LEFT PHILIP MORRIS UP UNTIL TODAY, DID
YOU EVER TRY TO PUBLISH OR PRESENT
INFORMATION CONCERNING THE WORK THAT

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://www.industrydocuments.ucsf.edu/docs/yrhd0001

YOU HAD DONE ON NICOTINE AND RATS
WHILE EMPLOYED AT PHILIP MORRIS?
"A YES. ON SEVERAL
OCCASIONS WE TIED TO DO THAT. WE
EITHER SUBMITTED SOME OF THE RESULTS
TO SCIENTIFIC MEETINGS WHERE WE WOULD
1692
GO AND DO A PRESENTATION OR WE
SUBMITTED MANUSCRIPTS TO PROFESSIONAL
JOURNALS FOR PUBLICATION. AND ONCE
PHILIP MORRIS FOUND OUT ABOUT THIS AND
THEY FOUND OUT BY MONITORING WHAT GOES
ON IN SCIENCE, KEEPING UP WITH THE
LITERATURE, WE RECEIVED A LETTER FROM
THE COUNSEL, THE LAWYER'S OFFICE FROM
PHILIP MORRIS IN NEW YORK TELLING US
THAT WE SHOULD NOT BE DOING THAT, THAT
WE SHOULD STOP. ONCE WE IGNORED THAT
LETTER AND CONTINUED TO DO IT, WE
RECEIVED A SECOND LETTER AND AT THAT
POINT WE WERE TOLD THAT IF WE
CONTINUED THIS ACTIVITY, THEY WOULD
TAKE LEGAL ACTION AGAINST US.
"Q SO DID YOU STOP?
"A AT THAT POINT, WE
STOPPED.
"Q AND WHEN YOU WERE
DESCRIBING THE WORK BEING DONE IN THE
RAT LABORATORY AS SECRET, WAS IT ALSO
SECRET FROM OTHER DEPARTMENTS AT
PHILIP MORRIS IN-HOUSE?
"A WE HAD -- I CAN'T
TELL YOU WHAT OTHER DEPARTMENTS KNEW
WHAT WE WERE DOING, TO WHAT EXTENT.
BUT WE HAD A VERY CLOSED LABORATORY.
1693
OUR COLLEAGUES FROM OTHER GROUPS WERE
NOT ALLOWED TO COME IN AND TOUR THE
LAB. WE DID NOT GIVE PRESENTATIONS TO
THE RESEARCH CENTER THE WAY ALL THE
OTHER SCIENTISTS DID. WE HAD A VERY
RESTRICTED CIRCULATION FOR OUR
DOCUMENTS. THERE WERE SOME WORDS WE
WERE NOT ALLOWED TO USE IN OUR
DOCUMENTS.
WE WERE NOT ALLOWED,
CERTAINLY, TO BRING OUTSIDE VISITORS
IN, OUTSIDE THE COMPANY, IN TO SEE THE
LAB. AND AS I INDICATED, EVEN OUR
RATS WERE BROUGHT UP TO THE LAB IN
SECRET, UNDER A TOWEL ON A CART SO
THAT PEOPLE COULD NOT SEE THAT THEY
WERE THERE.
"Q NOW, IF YOU HAD BEEN
PERMITTED TO PUBLISH WHAT YOU WANTED
TO PUBLISH, WHAT WOULD HAVE BEEN THE
FOCUS OF YOUR ARTICLES?
"A WE HAD COMPLETED
STUDIES ON SEVERAL AREAS RELATED TO
NICOTINE ABUSE, ARTICLES ON NICOTINE
SELF-ADMINISTRATION IN RATS, ARTICLES
ON NICOTINE TOLERANCE IN RATS, AN
ARTICLE ON NICOTINE PHYSICAL

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Stanford Libraries | industrydocuments.ucsf.edu/docs/yrhd0001

28 DEPENDENCE IN RATS AND ARTICLES ON
1694
1 BRAIN SITES WHERE IN THE BRAIN
2 NICOTINE IS ACTING, AGAIN.
3 "Q IN TERMS OF YOUR
4 WORK IN THE RAT LABORATORY WHILE
5 EMPLOYED AT PHILIP MORRIS, DID YOU
6 EVER REACH A CONCLUSION AS TO WHETHER
7 NICOTINE WAS A POSITIVE REINFORCER FOR
8 RATS?
9 "A YES. THAT WAS A
10 VERY EARLY CONCLUSION DEMONSTRATED BY
11 THE VERY FIRST SELF-ADMINISTRATION
12 STUDY. UP UNTIL THAT TIME, MOST
13 SELF-ADMINISTRATION STUDIES IN ANIMALS
14 WITH A VARIETY OF DRUGS HAD BEEN
15 WELL-ESTABLISHED. THE COCAINES, THE
16 HEROINES, THAT SORT OF THING. STUDIES
17 WITH SELF-ADMINISTRATION WITH NICOTINE
18 HAD NOT BEEN AS SUCCESSFUL AND I THINK
19 WE COMPLETED, WE DID COMPLETE THE
20 FIRST THOROUGH DEMONSTRATION IN,
21 UNEQUIVOCAL DEMONSTRATION IN RATS THAT
22 NICOTINE FUNCTIONS AS A POSITIVE
23 REINFORCER, WHICH MEANS THE ANIMALS
24 WILL WORK FOR IT, WORK TO GET IT.
25 THEY WILL WORK TO PRESS A LEVER TO GET
26 THE INFUSION OF NICOTINE INTO THEIR
27 BLOOD STREAM.
28 "Q WHEN A RAT WOULD
1695
1 PRESS A LEVER AND GET THIS INFUSION OF
2 NICOTINE, WAS THERE ANYTHING
3 IMMEDIATELY OBSERVABLE IN THEIR
4 BEHAVIOR, HOW THEY ACTED AFTER THEY
5 GOT THAT SHOT?
6 "A THEY LOOKED QUITE
7 NORMAL AND THEN USUALLY PROCEEDED A
8 SHORT TIME LATER TO PRESS THE LEVER
9 AGAIN FOR MORE NICOTINE.
10 "Q IN TERMS OF WRITING
11 UP YOUR REPORTS, IN TERMS OF
12 LABORATORY DATA, WERE THERE ANY
13 RESTRICTIONS IMPOSED UPON YOU AS TO
14 LANGUAGE YOU COULD USE OR NOT USE IN
15 REFERRING TO YOUR FINDINGS AND
16 REFERRING TO YOUR DATA?
17 "A WE NEVER USED THE
18 WORD 'DRUG' FOR NICOTINE. WE WERE
19 TOLD NOT TO CALL NICOTINE A DRUG. IT
20 WAS A COMPOUND.
21 "WE WERE TOLD TO KEEP IT OUT
22 OF THE REALM OF THE STANDARD DRUGS OF
23 ABUSE, AGAIN, THE COCAINES AND
24 HEROINES.
25 "IN ONE CASE, WE WERE
26 ACTUALLY -- WELL, WROTE DOWN
27 'NICOTINE' IT WAS CHANGED TO JUST THE
28 WORD 'COMPOUND.'
1696
1 "AND THE WORD 'ADDICTION'
2 WAS CERTAINLY NEVER USED OPENLY OR
3 WRITTEN DOWN.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://www.industrydocuments.ucsf.edu/docs/yrhd0001

"Q HOW ABOUT THE WORD
'CANCER'?
"A CANCER, WHICH WAS
SOMETHING WE DID NOT STUDY, THERE WAS
A WHOLE OTHER GROUP STUDYING IT THAT
WAS NEVER USED OPENLY. THE WORD FOR
CANCER WAS 'BIOLOGICAL ACTIVITY.'
"Q DURING THE PERIODS
OF TIME THAT YOU WERE EMPLOYED IN THE
LABORATORY, I AM SURE, I ASSUME YOU
HAD INTERACTION WITH DR. DENOBLE JUST
ABOUT EVERY DAY?
"A EVERY DAY WE WORKED
VERY CLOSELY TOGETHER.
"Q HOW ABOUT
DR. CHARLES?
"A DR. CHARLES, WE HAD
A LOT OF INTERACTION. HE WAS OUR
IMMEDIATE SUPERVISOR. IF WE DIDN'T
SEE HIM DAILY IT WAS SEVERAL TIMES A
WEEK.
"Q AND HOW FREQUENTLY
WITH DR. OSDENE?
"A DR. OSDENE WAS
DR. CHARLES' BOSS AND OUR CONTACT WAS
1697
LESS FREQUENT, BUT STILL ON A REGULAR
BASIS, WEEKLY, SEVERAL TIMES A MONTH,
DEPENDING ON HIS SCHEDULE.
"HE WAS A FREQUENT VISITOR
TO THE LABORATORY.
"Q WHEN YOU WERE
ACTUALLY EMPLOYED AT PHILIP MORRIS IN
THE LABORATORY, DID YOU AND
DR. DENOBLE HAVE SOME OF YOUR ARTICLES
PUBLISHED?
"A DR. DENOBLE HAD ONE
ARTICLE PUBLISHED JUST ABOUT THE TIME
I GOT THERE.
"Q IN TERMS OF ARTICLES
THAT YOU WERE TO BE -- EXCUSE ME -- IN
TERMS OF ARTICLES THAT WERE TO BE
PUBLISHED, WHO DID YOU OR ANYONE ELSE,
THE OTHER SCIENTISTS, HAVE TO RUN IT
BY WHO HAD TO GIVE PERMISSION THAT
THIS ARTICLE WAS OKAY TO PUBLISH, THIS
ARTICLE WASN'T?
"A WELL, IN OUR CASE,
AGAIN, WE HAD A VERY RESTRICTED
AUDIENCE. ARTICLES FROM OUR
LABORATORY WENT TO JIM CHARLES THEN TO
TOM OSDENE.
"THEN THEY WOULD GO TO NEW
YORK FOR REVIEW BY FRED NEWMAN, THE
1698
ATTORNEY. AND THEN WE WOULD GET
FEEDBACK BACK DOWN THE CHAIN.
"Q SPECIFICALLY, WHAT
RESEARCH WERE YOU PURSUING WITH
RESPECT TO NICOTINE AND ACETALDEHYDE
IN TERMS OF SELF-ADMINISTRATION IN
RATS AT THE TIME THE LABORATORY WAS
CLOSED IN APRIL OF 1984?

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

"A THE ACETALDEHYDE
WORK WAS FASCINATING. IT WAS A LOT OF
INTEREST TO THE COMPANY AND TO OUR
CONSULTANTS. WE WERE ALL VERY
INTERESTED IN IT BECAUSE, REALLY,
HERE, FOR THE FIRST TIME, THERE WAS
ANOTHER PRODUCT IN CIGARETTE SMOKE
THAT WAS IDENTIFIED THAT WOULD -- THAT
HAD REINFORCING PROPERTIES. IN THE
RAT, IT WAS CLEARLY SELF-ADMINISTERED
AND EVEN MORE INTERESTING, WHEN YOU
PUT ACETALDEHYDE AND NICOTINE TOGETHER
IN THE SAME BOTTLE, YOU HAVE GOT AN
EFFECT THAT WE CALLED SUPER ADDITIVE.
THE EFFECT OF THE COMBINED CHEMICALS
WAS GREATER THAN THE EFFECT OF THE TWO
EFFECTS ALONE, IF YOU JUST ADDED THEM
TOGETHER. THERE WAS A SYNERGISTIC
EFFECT OR A SUPER ADDITIVE EFFECT. SO
THE RATS REALLY WORKED HARD TO GET
1699
THAT COMBINATION.
"Q IN YOUR CURRICULUM
VITAE, YOU INDICATE THAT YOU GAVE
TESTIMONY FOR THE UNITED STATES HOUSE.
"DR. MELE, I HAD ASKED YOU
ABOUT TESTIMONY YOU GAVE BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
ON RESEARCH AND THE TOBACCO INDUSTRY
IN APRIL OF 1994.
"YOU TESTIFIED BEFORE
CONGRESS?
"A CORRECT
"Q DID YOU TESTIFY
GENERALLY IN THE SAME KINDS OF AREAS
THAT YOU HAVE DISCUSSED TODAY?
"A CORRECT.
"Q WHAT, DO YOU HAVE
KNOWLEDGE OF WHAT POSITION PHILIP
MORRIS TOOK WITH RESPECT TO YOUR
TESTIMONY FOLLOWING YOUR TESTIMONY
BEFORE CONGRESS?
"A FOLLOWING THE
TESTIMONY?
"A RIGHT
"Q IMMEDIATELY
FOLLOWING THE TESTIMONY?
"Q WHENEVER.
"A THEY WERE NOT
1700
COMPLIMENTARY. THEY PUT OUT PRESS
RELEASES AND INTERVIEWS RIGHT THERE
THAT ATTEMPTED TO DISCREDIT OUR
TESTIMONY AND THEY HAD THEIR CURRENT
DIRECTOR OF RESEARCH, DR. ELLIS ALSO
ATTEMPTED TO DISCREDIT SOME OF OUR
RESEARCH
"Q I AM GOING TO SHOW
YOU PLAINTIFF'S EXHIBITS NUMBER INGLE
PLAINTIFF 5460, THE TITLE OF WHICH IS,
'PHILIP MORRIS U.S.A. STATEMENT,'
RESPONDING TO CONGRESSMAN WAXMAN'S
PRESS CONFERENCE, MARCH 31, 1994, AND

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

14 ASK YOU IF YOU HAVE SEEN THIS BEFORE."
15 "WELL, HAVE YOU SEEN THIS
16 DOCUMENT?
17 "A YES, YES, I HAVE.
18 "Q AND WERE YOU AWARE
19 AT THE TIME OF THE RESPONSE, OF
20 COURSE, THE RESPONSE OF PHILIP MORRIS,
21 TO AT LEAST DR. DENOBLE'S TESTIMONY AS
22 WELL AS YOUR OWN?
23 "A I WAS AWARE OF
24 PHILIP MORRIS'S RESPONSE, YES.
25 "Q DR. ELLIS MENTIONED
26 YOU BY NAME?
27 "A SHE MENTIONED THE
28 WORK I CONDUCTED.
1701
1 "Q AND WAS
2 DR. DENOBLE'S TESTIMONY TO CONGRESS IN
3 ANY WAY SUBSTANTIALLY DIFFERENT THAN
4 YOUR OWN OR DID YOU COVER THE SAME
5 SUBJECTS AND REACH THE SAME
6 CONCLUSIONS?
7 "A NO, WE WERE THERE AT
8 THE SAME TABLE AND THERE WAS
9 CONCURRENCE.
10 "Q THERE WAS
11 CONCURRENCE, OKAY.
12 "DR. MELE, DID PHILIP
13 MORRIS, DURING THE PERIOD OF TIME THAT
14 YOU WERE THERE, HAVE THE SCIENTIFIC
15 TECHNOLOGY TO REMOVE ALL THE NICOTINE
16 FROM THE CIGARETTE IF THAT'S WHAT THEY
17 CHOSE TO DO?
18 "A CORRECT. YES. THEY
19 DID.
20 "A AND DID THEY, IN
21 FACT, MAKE CIGARETTES, SOME
22 CIGARETTES, I AM NOT TALKING ABOUT
23 COMMERCIAL NECESSARILY, WITHOUT --
24 "A THEY WOULD MAKE
25 EXPERIMENTAL CIGARETTES AS REQUESTED
26 BY MR. FRANK RYAN AND BILL DUNN IN THE
27 BEHAVIORAL RESEARCH UNIT.
28 "THEY COULD TAKE OUT
1702
1 NICOTINE. THEY COULD ADD IN NICOTINE.
2 THEY COULD MANIPULATE THE LEVELS OF
3 NICOTINE. THESE WERE ALL EXPERIMENTAL
4 CIGARETTES AND THEY WERE USED IN
5 SMOKING STUDIES WITH HUMANS AT THE
6 COMPANY.
7 "Q YOU HAD TOLD US
8 EARLIER IN YOUR TESTIMONY ABOUT THE
9 GOAL OF THE ANALOG THAT PHILIP MORRIS
10 WAS HOPING TO ACHIEVE WHEN YOU WERE
11 FIRST HIRED.
12 "AT THE TIME THE LABORATORY
13 WAS CLOSED IN APRIL OF '84, FROM A
14 PURELY SCIENTIFIC STANDPOINT, TO YOUR
15 KNOWLEDGE, WAS THAT ROLE ACHIEVED?
16 "A YES, AN ANALOG HAD
17 BEEN IDENTIFIED THAT MET THE CRITERIA.
18 "Q THAT MET PHILIP

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

19 MORRIS'S CRITERION?
20 "A YES, IN FACT, TWO.
21 "Q WHICH YOU HAVE
22 DISCUSSED ALREADY?
23 "A YES, THE 2-PRIME
24 METHYLNICOTINE WAS THE BEST ONE. AND
25 THE 4-PRIME METHYLNICOTINE WAS NUMBER
26 TWO.
27 "Q TO YOUR KNOWLEDGE,
28 WERE EITHER OF THOSE TWO COMPOUNDS
1703
1 EVER USED IN A COMMERCIAL CIGARETTE AT
2 PHILIP MORRIS WHILE YOU WERE THERE?
3 "A I HAVE NO IDEA
4 "Q HAVE YOU EVER
5 TESTIFIED IN A COURTROOM BEFORE TODAY?
6 "A NO.
7 "Q WHAT ARE YOU
8 CHARGING FOR YOUR TESTIMONY IN THIS
9 CASE?
10 "A EXPENSES, WHATEVER
11 IT COSTS ME TO GET HERE AND GET HOME.
12 "Q NOT CHARGING
13 ANYTHING FOR YOUR TIME?
14 "A NOTHING.
15 MR. PIUZE: YOUR HONOR, THAT CONCLUDES
16 THIS VOLUME HERE.
17 AND I THINK IT WOULD BE AN
18 APPROPRIATE TIME TO HAVE A SHORT BREAK BEFORE WE GO
19 TO MORE OF THIS STUFF.
20 THE COURT: ALL RIGHT, LADIES AND
21 GENTLEMEN OF THE JURY THERE ARE SOME THINGS THAT WE
22 ARE GOING TO HAVE TO DO. YOU NOTICE AS WE GO
23 ALONG, WE ARE SKIPPING CERTAIN PORTIONS. THERE'S
24 COLLOQUY BETWEEN THE JUDGE AND SO FORTH AND THE
25 LAWYERS, THAT HAS NOTHING TO DO WITH WHAT WE ARE
26 DOING HERE, AND I NEED TO GO THROUGH THAT WITH THE
27 LAWYERS.
28 WE WILL SEE YOU AT 20 MINUTES UNTIL
1704
1 11:00.
2
3 (AT THIS TIME, A RECESS
4 WAS TAKEN.)
5
6 (THE FOLLOWING PROCEEDINGS
7 WERE HELD IN OPEN COURT IN
8 THE PRESENCE OF THE JURY.)
9
10 THE COURT: ALL RIGHT, OUR JURY PANEL IS
11 WITH US. COUNSEL ARE PRESENT AS WELL.
12 WE WILL CONTINUE TO PROCEED.
13 MR. PIUZE.
14 MR. PIUZE: THANK YOU, YOUR HONOR.
15 18220, MR. GOLDSTEIN.
16 MR. GOLDSTEIN: THANK YOU.
17
18
19 PAUL C. MELE,
20 COURTROOM TESTIMONY CONTINUED TO BE READ INTO THE
21 RECORD AS FOLLOWS:
22 "Q DR. MELE, HOPEFULLY
23 YOU STILL LOOK FAMILIAR TO THE JURY.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

24 YOU WERE HERE LAST WEEK. FOR THE
25 RECORD, PLEASE, AGAIN, STATE YOUR FULL
26 NAME AND ADDRESS.
27 "A PAUL CAMILLE MELE.
28 17212 FALLSTAFF LANE, OLNY, MARYLAND.
1705
1 "Q NOW, DR. MELE, WHEN
2 THE RAT LABORATORY WAS IN OPERATION,
3 FROM THE TIME YOU WERE FIRST EMPLOYED
4 BY PHILIP MORRIS IN NOVEMBER OF 1981,
5 UNTIL THE LABORATORY WAS CLOSED IN
6 APRIL OF 1984, HAD YOU BEEN PROMOTED
7 WITHIN PHILIP MORRIS?
8 "A YES.
9 "Q FROM WHAT TO WHAT?
10 "A THE TITLE I STARTED
11 OFF WITH WAS CALLED SCIENTIST. AND I
12 WAS PROMOTED TO THE RESEARCH SCIENTIST
13 LEVEL, THE NEXT STEP UP AFTER A YEAR
14 OR SO.
15 "Q DID PHILIP MORRIS
16 HAVE A SYSTEM IN PLACE WHEREBY YOUR
17 WORK AS A SCIENTIST AND THEN AS A
18 RESEARCH SCIENTIST, WAS EVALUATED BY
19 YOUR SUPERIORS?
20 "A YES. ALL MY WORK
21 WENT UP THROUGH MY CHAIN OF COMMAND.
22 FIRST DR. DENOBLE AND THEN UP THROUGH
23 EITHER DR. DUNN, INITIALLY, BUT MOST
24 OF THE TIME IT WAS DR. JIM CHARLES AND
25 ULTIMATELY DR. OSDENE.
26 "Q WHAT KIND OF
27 EVALUATIONS DID YOU RECEIVE DURING THE
28 PERIOD OF TIME THAT YOU WERE EMPLOYED
1706
1 AT PHILIP MORRIS?
2 "A THEY WERE ALL HIGHLY
3 POSITIVE. THEY ARE ALL VERY GOOD,
4 VERY POSITIVE. I ALWAYS RECEIVED VERY
5 TOP RATINGS, GOOD RAISES, BONUSES AND
6 ULTIMATELY THE PROMOTION. SO THERE
7 WAS NEVER ANY DISSATISFACTION
8 WHATSOEVER.
9 "Q TO YOUR KNOWLEDGE,
10 HAD YOU EVER RECEIVED A NEGATIVE
11 EVALUATION?
12 "A NEVER.
13 "Q LET ME ASK YOU ABOUT
14 SEVERAL EXHIBITS.
15 "INGLE EXHIBIT 5448, THE
16 TITLE OF WHICH IS 'DEVELOPMENT OF
17 BEHAVIORAL TOLERANCE FOLLOWING CHRONIC
18 NICOTINE ADMINISTRATION.' THIS IS
19 SOMETHING THAT YOU AUTHORED ALONG WITH
20 DR. DENOBLE; IS THAT CORRECT?
21 "A CORRECT.
22 "Q WHAT WAS THE THRUST
23 OF THIS ARTICLE?
24 "A THIS PAPER LOOKED AT
25 SEVERAL ASPECTS OF TOLERANCE TO
26 NICOTINE. CERTAINLY TOLERANCE TO
27 NICOTINE HAD BEEN KNOWN UP UNTIL THAT
28 POINT.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

1707
1 "THE VARIOUS TYPES OF
2 TOLERANCE, I THINK, AS WE DISCUSSED
3 LAST WEEK, THIS LOOKED AT TWO
4 PARTICULAR TYPES OF TOLERANCE TO
5 NICOTINE, ONE REFERRING TO BRAIN OR
6 ARE BEHAVIORAL TOLERANCE AND ONE TO
7 ANOTHER GENERAL, WHAT WE CALL
8 METABOLIC TOLERANCE, THE WAY THE BODY
9 CLEARS NICOTINE OUT OF THE SYSTEM WHEN
10 IT SEES IT REGULARLY. SO IT SHOWED
11 TWO ASPECTS OF TOLERANCE. AND WHAT WE
12 CALL A BRAIN TOLERANCE THAT DEVELOPS
13 WHEN THE BODY SEES IT ON A REGULAR
14 BASIS.
15 "Q IN ACADEMIC OR
16 RESEARCH CIRCLES, IS IT NORMAL FOR A
17 SCIENTIST SUCH AS YOURSELF, A PH.D.,
18 TO WRITE UP YOUR RESEARCH AND THE
19 RESULTS OF YOUR RESEARCH?
20 "A THAT'S PROBABLY THE
21 MOST BASIC THING YOU DO AS A
22 SCIENTIST, YOU DO YOUR STUDY, YOU
23 WRITE A MANUSCRIPT AND YOU TRY AND
24 PUBLISH IT.
25 "Q WAS PLAINTIFF'S
26 EXHIBIT 5448 EVER PUBLISHED?
27 "A NO, IT WAS NEVER
28 PUBLISHED.
1708
1 "Q AND WHAT REASON WERE
2 YOU GIVEN BY YOUR SUPERIORS AT PHILIP
3 MORRIS AS TO WHY IT WAS NOT PUBLISHED?
4 "A THAT WAS MY FIRST
5 LARGE STUDY AT PHILIP MORRIS. IT TOOK
6 ABOUT A YEAR TO COMPLETE AND, IN LATE
7 1982, I SUBMITTED IT UP THROUGH THE
8 REVIEW CHAIN FOR APPROVAL FOR
9 PUBLICATION. OR AT LEAST TO SUBMIT IT
10 TO A JOURNAL AND TRY AND GET IT
11 PUBLISHED.
12 "AND DR. CHARLES CAME DOWN
13 TO MY OFFICE ONE DAY AND TOLD ME HE
14 COULD NOT, WOULD NOT APPROVE IT TO GO
15 OUTSIDE OF PHILIP MORRIS.
16 "HIS STATEMENT WAS THAT
17 BECAUSE WE WERE DEMONSTRATING
18 TOLERANCE TO NICOTINE, WE WERE THEN
19 DEMONSTRATING THAT NICOTINE WAS A
20 DEPENDENCE PRODUCING SUBSTANCE BASED
21 ON THE DIAGNOSTIC AND STATISTICAL
22 MANUAL OF THE AMERICAN PSYCHIATRIC
23 ASSOCIATION. THAT WAS, AT THE TIME,
24 THEIR DEFINITION OF SUBSTANCE
25 DEPENDENCE, ONE OF THEIR DEFINITIONS
26 WAS -- ONE OF THEIR CRITERIA FOR
27 SUBSTANCE DEPENDENCE IN THAT VOLUME BY
28 THE AMERICAN PSYCHIATRIC ASSOCIATION
1709
1 WAS TOLERANCE.
2 "SO DR. CHARLES CONCLUDED
3 THAT IF WE ARE SHOWING TOLERANCE IN
4 RATS, WE WERE THEN DEMONSTRATING

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://industrydocuments.ucsf.edu/docs/yrhd0001

5 SUBSTANCE DEPENDENCE TO NICOTINE.
6 "AND HE INDICATED THAT WOULD
7 NOT BE ACCEPTABLE FOR THE COMPANY FOR
8 GOOD -- OR GOOD FOR THE COMPANY TO
9 HAVE GONE OUT TO THE WORLD.
10 "Q SO THIS RESEARCH WAS
11 DONE AND WRITTEN UP BY YOU AND
12 DR. DENOBLE, BASICALLY NEVER SAW THE
13 LIGHT OF DAY; IS THAT CORRECT?
14 "A IT WASN'T UNTIL
15 SEVERAL YEARS LATER, AFTER WE LEFT
16 PHILIP MORRIS, IT WAS 1986, WE
17 SUBMITTED AN ABSTRACT OF THAT, A
18 SHORTER VERSION OF THAT RESEARCH TO A
19 MEETING, THE FEDERATION OF AMERICAN
20 SOCIETIES FOR EXPERIMENTAL BIOLOGY.
21 "IT WAS A PROFESSIONAL
22 SCIENTIFIC MEETING THAT MEETS EVERY
23 YEAR.
24 "AND WE WENT TO THAT MEETING
25 AND WE DID WHAT'S CALLED A POSTER
26 PRESENTATION, YOU HANG UP THE DATA,
27 YOU HANG IT UP ON A POSTER BOARD AND
28 PEOPLE WALK BY FOR THREE HOURS AND
1710
1 TALK TO YOU ABOUT IT.
2 "SO WE DID THAT. AND IT WAS
3 SHORTLY AFTER THAT THAT WE STARTED
4 RECEIVING THE LETTERS FROM THE PHILIP
5 MORRIS LEGAL OFFICE TELLING US NOT TO
6 DO THIS ANY MORE AND THEN THREATENING
7 LEGAL ACTION IF WE CONTINUED TO DO
8 THIS.
9 "Q THE OTHER ARTICLE IS
10 INGLE PLAINTIFF'S EXHIBITS 5444,
11 INTRAVENOUS NICOTINE
12 SELF-ADMINISTRATION IN RATS, BY
13 DR. MELE AND DENOBLE.
14 "NOW, DR. MELE, AS I SAY,
15 THE TITLE OF 5444 IS 'INTRAVENOUS
16 NICOTINE SELF-ADMINISTRATION IN RATS.'
17 AND WHAT WAS THE FOCUS OF THIS ARTICLE
18 BY YOU AND DR. DENOBLE?
19 "A THIS WAS OUR FIRST
20 PAPER ON SELF-ADMINISTRATION OF
21 NICOTINE. THIS IS THE PAPER THAT
22 DEMONSTRATED THAT RATS WILL, INDEED,
23 WORK TO OBTAIN OBJECTIONS OF NICOTINE
24 CORRECTLY INTO THE BLOOD STREAM.
25 "THAT'S WHERE THEY ARE
26 PRESSING THE LEVER AND OPERATING A
27 PUMP WHICH THEN SQUIRTS A SMALL AMOUNT
28 OF THE NICOTINE SOLUTION, YOU KNOW,
1711
1 INTO THE BLOOD.
2 "THIS PAPER DEMONSTRATES
3 REALLY CONCLUSIVELY FOR THE FIRST TIME
4 IF RATS THAT NICOTINE CAN ACT AS A
5 POSITIVE REINFORCER, IN A VERY
6 THOROUGH AND COMPLETE STUDY WHICH WAS
7 REALLY THE MAIN CRITERIA FOR STUDYING
8 DRUG ABUSE AND DRUG DEPENDENCE.
9 "Q NOW, WAS THIS

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

ARTICLE, EXHIBIT 5444, INTRAVENOUS NICOTINE SELF-ADMINISTRATION IN RATS, WAS THIS EVER PUBLISHED?

"A THIS PAPER WAS SUBMITTED TWICE FOR PUBLICATION. IT WAS ACCEPTED TWICE FOR PUBLICATION AND IT WAS RETRACTED BOTH TIMES.

"ONCE WHEN WE WERE STILL WORKING AT PHILIP MORRIS, THEY DID ALLOW THIS, THEY DID ALLOW US TO SEND THIS OUT. IT WAS ACCEPTED AT THE 'JOURNAL OF PSYCHOPHARMACOLOGY' WHICH WAS AND STILL IS ONE OF THE PREEMINENT JOURNALS IN THIS FIELD.

"IN MID-1983, WE WERE FORCED TO CONTACT THE JOURNAL AND SAY WE DON'T WISH TO PUBLISH IT, PLEASE TAKE IT BACK. AND THEN THE SECOND TIME WAS SEVERAL YEARS AGAIN, AFTER WE HAD

1712

LEFT -- SEVERAL YEARS AFTER. AND THEN THE SECOND TIME WAS SEVERAL YEARS AGAIN AFTER WE HAD LEFT PHILIP MORRIS, WE SENT THIS OUT TO THE SAME JOURNAL FOR PUBLICATION. THEY REVIEWED IT AGAIN AND AGAIN THEY ACCEPTED IT. BUT ABOUT THAT TIME WE STARTED RECEIVING THE LETTER FROM THE PHILIP MORRIS ATTORNEYS SAYING IF WE CONTINUED TO TRY AND PUT DATA OUT, THEY WOULD TAKE LEGAL ACTION AGAINST US, SIMILAR TO THE TOLERANCE PAPER. AND ONCE AGAIN, WE HAD TO CONTACT THE JOURNAL AND SAY, WE CAN'T PUBLISH THIS, PLEASE DON'T DO IT.

"Q NOW, THESE TWO JOURNALS, WHICH HAD ACCEPTED THIS ARTICLE FOR PUBLICATION, WERE THEY PEER REVIEWED JOURNALS?

"A OH, YES. PSYCHOPHARMACOLOGY IS, AGAIN, ONE OF THE PREEMINENT JOURNALS. IT'S BEEN AROUND FOR QUITE A NUMBER OF YEARS AND HAS A VERY ESTEEMED SET OF REVIEWERS.

"Q YOU MENTIONED LAWYER LETTERS IN CONNECTION WITH RESEARCH THAT YOU WANTED TO PUBLISH.

"AND I'D LIKE YOU TO LOOK AT

1713

INGLE EXHIBIT 5429 WHICH IS A LETTER FROM THE ASSISTANT GENERAL COUNSEL OF PHILIP MORRIS TO YOU, DATED APRIL 23, 1986.

"NOW, THE FIRST SENTENCE OF THE LETTER SAYS: 'IT HAS COME TO OUR ATTENTION THAT YOU PRESENTED A PAPER AT THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY IN SAINT LOUIS ON THE DEVELOPMENT OF BEHAVIORAL TOLERANCE FOLLOWING CHRONIC NICOTINE ADMINISTRATION.'

"IS THAT THE PRESENTATION YOU JUST TOLD THE JURY ABOUT?

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://www.industrydocuments.ucsf.edu/docs/yrhd0001

"A YES. CORRECT.
"Q OKAY. NOW, AFTER HAVING RECEIVED THIS LETTER FROM THE ASSISTANT GENERAL COUNSEL OF PHILIP MORRIS DATED APRIL 23, 1986, DID YOU COMPLY WITH THIS LETTER?
"A NO, WE IGNORED IT. WE FELT IT WAS IMPORTANT ENOUGH TO TRY AND GET SOME MORE OF THE DATA OUT. THIS ONE WAS ALREADY PRESENTED. WE HAD A NUMBER OF OTHER STUDIES ON VARIOUS ASPECTS OF NICOTINE. WE JUST FELT IT WAS CRITICAL THAT THE, YOU KNOW, THE SCIENTIFIC COMMUNITY AND THE

1714

WORLD FIND OUT WHAT WE DID AND WHAT WE FOUND OUT AND ALLOW THEM TO MAKE A DECISION WHETHER THIS WORK WAS IMPORTANT AND USEFUL IN ANY WAY.
"SO WE PUT OUT ANOTHER ABSTRACT AND HAD SUBMITTED ANOTHER PAPER FOR PUBLICATION.
"Q OKAY, AND THEN ON SEPTEMBER 10, 1986, AND I AM TALKING ABOUT PLAINTIFF'S EXHIBIT 5430, YOU AND DR. DENOBLE RECEIVED A LETTER, CERTIFIED MAIL, RETURN RECEIPT REQUESTED, AGAIN BY MR. TOUSIG, THE ASSISTANT GENERAL COUNSEL OF PHILIP MORRIS. THE FIRST SENTENCE OF THE LETTER SAYS AS FOLLOWS: 'GENTLEMEN, ON APRIL 23, 1986, I SENT EACH OF YOU A LETTER ADVISING YOU OF YOUR OBLIGATION PURSUANT TO YOUR AGREEMENT WHICH YOU SIGNED WITH THE COMPANY AT THE COMMENCEMENT OF YOUR EMPLOYMENT.'
"AND THEN THE LETTER GOES ON, AND THE JURY WILL HAVE AN OPPORTUNITY TO READ THIS LETTER IN ITS ENTIRETY LATER, THAT TOWARD THE END OF THE LETTER, THE LAWYER FROM PHILIP MORRIS SAYS, 'THE COMPANY CANNOT TOLERATE THIS TYPE OF CONDUCT.'

1715

AND THE LAST SENTENCE OF THE LETTER SAYS: 'ANY FURTHER BREACH OF YOUR AGREEMENT WILL RESULT IN ACTION BEING TAKEN.
"VERY TRULY YOURS.
"WHAT WAS YOUR RESPONSE TO THIS LETTER OF SEPTEMBER 10, 1986, FROM THE ASSISTANT GENERAL COUNSEL OF PHILIP MORRIS?
"A WELL, WE ACTUALLY CALLED THE COUNSEL AND DISCUSSED THIS WITH HIM AND HE WAS VERY EMPHATIC THAT IF WE WERE TO CONTINUE THIS THEY WOULD HAVE TO TAKE LEGAL ACTION AGAINST US. BEING TWO INDEPENDENT PEOPLE WITHOUT RESOURCES TO CHALLENGE A COMPANY LIKE PHILIP MORRIS IN ANY LEGAL PROCEDURES, WE THOUGHT IT WAS WISE, AT THAT POINT, TO STOP PUBLISHING DATA.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Tobacco Industry Documents Library at UCSF http://www.industrydocuments.ucsf.edu/docs/yrhd0001

20 "Q YOU BACKED OFF?
21 "A WE BACKED OFF
22 "Q NOW, DR. MELE, INGLE
23 PLAINTIFF'S EXHIBIT NUMBER 5446, ARE
24 THESE LIBRARY REQUEST FORMS. AND WE
25 HAD DISCUSSED THIS LAST WEEK, THAT
26 WHEN THERE WAS AN ARTICLE IN THE
27 LITERATURE THAT YOU WERE INTERESTED
28 IN, AND IT WAS NOT ON THE PREMISES OF
1716
1 PHILIP MORRIS, IN THEIR LIBRARY, YOU
2 HAD AN OPTION OF FILLING OUT ONE OF
3 THESE CARDS AND WITHIN A RELATIVELY
4 SHORT PERIOD OF TIME, YOU WOULD GET
5 THE ARTICLE; IS THAT CORRECT?
6 "A THAT IS CORRECT.
7 "Q WHY DON'T YOU JUST
8 IDENTIFY THESE.
9 "A THESE ARE THE
10 STANDARD REQUEST FORMS WE PUT IN
11 THROUGH THE LIBRARY THERE. THEY HAD A
12 NICE LIBRARY, A GOOD SELECTION OF
13 JOURNALS, BUT NOT ALL THE JOURNALS WE
14 NEEDED. IF WE NEEDED SOMETHING ELSE,
15 THIS WAS THE MECHANISM FOR GETTING
16 THEM.
17 "Q OKAY. WHO DID YOU
18 ACTUALLY GIVE THOSE CARDS TO?
19 "A THE LIBRARIAN
20 "Q THERE WAS, IN FACT,
21 A LIBRARIAN AT PHILIP MORRIS?
22 "A THEY HAD TWO OR
23 THREE. THEY HAD AN ACTUAL LIBRARY
24 THERE, LIKE A SMALL MEDICAL LIBRARY
25 THERE, LIKE ANY HOSPITAL WOULD HAVE,
26 WITH QUITE A COLLECTION OF BOOKS AND
27 SCIENTIFIC AND HEALTH RELATED
28 JOURNALS.
1717
1 "Q NOW, DR. MELE, I
2 WOULD LIKE YOU TO LOOK AT THE NEXT
3 PLAINTIFFS' EXHIBIT WHICH IS 498, A
4 MEMO ON THE STATIONERY OF PHILIP
5 MORRIS, DATED JUNE 18, 1980, FROM L.
6 W. DUNN TO DR. T.S. OSDENE. AND THE
7 SUBJECT IS POSSIBLE RESTRUCTURING OF
8 THE BEHAVIORAL RESEARCH LAB.
9 "WHAT, ESSENTIALLY, IS THE
10 THRUST OF THIS MEMO?
11 "A THIS MEMO OUTLINES
12 THE BEHAVIORAL RESEARCH GROUP. THERE
13 WERE FOUR COMPONENTS OR SECTIONS OF
14 THIS GROUP. THE GROUP I WAS IN, THE
15 BEHAVIOURAL PHARMACOLOGY PROJECT WAS
16 HEADED BY VIC DENOBLE AND THEN THERE
17 WERE THREE OTHER GROUPS, EXPERIMENTAL
18 NEUROPSYCHOLOGY, EXPERIMENTAL
19 PSYCHOLOGY, SOCIAL PSYCHOLOGY, ALL RUN
20 BY PROFESSIONAL INVESTIGATORS TO STUDY
21 CERTAIN ASPECTS OF SMOKING BEHAVIOR.
22 "Q NOW, IN TERMS OF
23 LOOKING AT THIS DOCUMENT, 498, IN
24 TERMS OF THE BEHAVIOURAL PHARMACOLOGY

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://www.industrydocuments.ucsf.edu/docs/yrhd0001

25 PROJECT, IT SAYS THE OBJECTIVE WAS TO
26 IDENTIFY THE UNIQUE PHARMACOLOGICAL
27 ACTIONS OF NICOTINE AS MANIFESTED IN
28 LOWER ORDERED MAMMALIAN BEHAVIOR. IS
1718
1 THIS WHAT YOUR RAT RESEARCH FOCUSED
2 ON?
3 "A CORRECT. THAT'S
4 ESSENTIALLY A FANCY WAY OF SAYING WE
5 LOOKED AT WHAT NICOTINE DID TO RATS.
6 THE MAIN OR ONE OF THE MAIN THRUSTS OF
7 THE LAB AGAIN WAS TO WORK ON THE
8 NICOTINE ANALOG PROGRAM. IT WAS TO
9 FIND A SUBSTITUTE, A REPLACEMENT
10 COMPOUND FOR NICOTINE, ONE THAT WOULD
11 HAVE THE SAME EFFECTS IN THE BRAIN AS
12 NICOTINE, ONE THAT WOULD KEEP PEOPLE
13 SMOKING, BUT ONE THAT DID NOT HAVE
14 NEGATIVE CARDIOVASCULAR EFFECTS OF
15 NICOTINE, THE ADVERSE EFFECTS ON THE
16 HEART AND BLOOD SYSTEM.
17 "Q OKAY. NOW, THE NEXT
18 DOCUMENT I AM GOING TO ASK YOU ABOUT,
19 DR. MELE, IS PLAINTIFF'S EXHIBIT
20 NUMBER 25, ON THE STATIONERY,
21 INTER-OFFICE CORRESPONDENCE AND ON THE
22 STATIONERY OF PHILIP MORRIS, U.S.A.,
23 FROM J. L. CHARLES TO DR. R. B.
24 SELIGMAN, DATED MARCH 18, 1980.
25 NOW, REMIND US AGAIN,
26 PLEASE, J. L. CHARLES IS WHO?
27 "A JIM CHARLES. HE WAS
28 TWO LEVELS ABOVE ME, HE WAS -- VICTOR
1719
1 DENOBLE WAS MY SUPERVISOR, CHARLES WAS
2 HIS SUPERVISOR. HE WAS THE DIRECTOR
3 OF THE BIOCHEMICAL RESEARCH DIVISION
4 AND EVENTUALLY TOOK OVER FOR TOM
5 OSDENE IN '84 WHEN OSDENE GAVE UP THAT
6 POSITION.
7 "Q NOW, THE SUBJECT IS
8 NICOTINE RECEPTOR PROGRAM, UNIVERSITY
9 OF ROCHESTER. WHAT WAS THE
10 RELATIONSHIP BETWEEN THE UNIVERSITY OF
11 ROCHESTER AND THE NICOTINE RECEPTOR
12 PROGRAM AS IT RELATED TO PHILIP
13 MORRIS'S RESEARCH?
14 "A WELL, THIS, AGAIN,
15 REFERS TO THE ANALOG PROGRAM, WHEN WE
16 WERE LOOKING FOR A SUBSTITUTE FOR
17 NICOTINE. OUR CHEMISTS IN HOUSE WOULD
18 SYNTHESIZE THESE ANALOGS, THESE
19 MOLECULES THAT LOOKED LIKE NICOTINE
20 AND THEY WERE TESTED IN SEVERAL WAYS.
21 WE HAD A LARGE COLLABORATION WITH DR.
22 LEO ABOOD AT THE UNIVERSITY OF
23 ROCHESTER IN ROCHESTER, NEW YORK. AND
24 HE DID STUDIES THAT LOOKED AT THE
25 EFFECTS OF THESE ANALOGS ON BRAIN
26 TISSUE, ON TISSUE THAT MEASURED
27 CARDIOVASCULAR EFFECTS.
28 "HE WAS A NEUROCHEMIST,
1720

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

NEUROPHARMACOLOGIST, AND HE WAS ESSENTIALLY -- AND HE ESSENTIALLY COMPLIMENTED THE WORK WE DID WITH THE NEUROLOGICAL.

"Q WHEN YOU LOOK AT THE SECOND PAGE, IT'S OBVIOUS TO SEE THAT DR. OSDENE IS RECEIVING A COPY OF THIS MEMO; CORRECT?

"A THAT IS CORRECT. THIS MEMO OUTLINES NOT ONLY THE BASICS OF THE ANALOG PROGRAM BUT ALSO THE BROADER APPROACH OF OUR LAB, ALSO TO LOOK AT THE EFFECTS OF NICOTINE. THEY MENTION THE EFFECTS OF NICOTINE ON THE SMOKER. WE ONLY WORK WITH RATS BUT THE BROADER ASPECTS OF LOOKING AT NICOTINE ON THE BEHAVIOR AND PHYSIOLOGY AND BRAIN ACTIVITY OF THE ANIMAL, NOT JUST THE ANALOGS, IT WAS BROADER THAN THAT.

"Q NOW, PLAINTIFF'S EXHIBIT 410, WHICH IS, AGAIN, INTER-OFFICE CORRESPONDENCE FROM THE PHILIP MORRIS HOME OFFICE IN NEW YORK CITY, FROM ATTORNEY ERIC TAUSIG, CONCERNING YOURSELF AND DR. DENOBLE, AND THE DATE OF THIS INTER-OFFICE CORRESPONDENCE IS APRIL 7, 1986. I

1721

JUST WANT TO ASK YOU IN A GENERAL WAY WHAT THIS RELATES TO

"A THIS IS A MEMO THAT, WHERE PHILIP MORRIS WAS EVALUATING THE APPROACH THEY WERE GOING TO TAKE WHEN WE PUT OUT THE ABSTRACT IN SAINT LOUIS, THE TOLERANCE ABSTRACT WITH THE FEDERATION MEETINGS.

"THIS, OBVIOUSLY, THEN, PRECEDED THE FIRST LETTER WE GOT FROM TAUSIG TELLING US WE SHOULD NOT BE DOING THAT ANY MORE.

"Q OKAY, THE NEXT EXHIBIT IS 5087. AND THE DATE OF THIS WAS JUNE 1ST, 1983. AND THE REPORT TITLE SIGNED BY YOU AND DR. DENOBLE IS "BEHAVIORAL PHARMACOLOGY, ANNUAL REPORT, 1983."

"TELL US, BASICALLY, WHAT THIS DOCUMENT COVERED.

"A THIS WAS ONE OF OUR ANNUAL REPORTS. WE DID THESE EVERY YEAR. WE BASICALLY SUMMARIZED WHAT WE WANTED TO DO, WHAT WE DID DO AND WHAT WE FOUND OUT. SO THIS WAS A WAY FOR MANAGEMENT TO KNOW THE KINDS OF STUDIES WE WERE -- WE WERE DOING, THE QUESTIONS WE WERE ASKING AND THE

1722

RESULTS WE WERE OBTAINING.

"MOST OF THE TIME I WAS THERE, THERE WAS A VERY LIMITED DISTRIBUTION OF THESE DOCUMENTS, VERY FEW PEOPLE SAW THEM.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

"IN THIS CASE, BECAUSE IT WAS, LOOKS LIKE MID-TO LATE '83, THE DISTRIBUTION LIST SHOWS THAT IT WAS BEING DISTRIBUTED A LITTLE WIDER THROUGHOUT THE RESEARCH CENTER, AT LEAST TO THE UPPER LEVEL SCIENTISTS.
"BUT THIS BASICALLY DESCRIBES WHAT WE DID AND WHAT WE FOUND OVER A GIVEN YEAR.
"Q OKAY. GO TO PAGE 66. AND THERE IS A HEADING, ROMAN NUMERAL III, ON PAGE 66, 'NICOTINE ACETALDEHYDE INTERACTIONS' AND THERE IS 'A' AND 1 AND 2. I WANT TO ASK YOU A QUESTION ABOUT NUMBER 2.
"UNDER THAT TITLE WHICH SAYS, 'THE OPTIMAL COMBINATIONS OF NICOTINE AND ACETALDEHYDE THAT RESULTS IN ENHANCED POSITIVE REINFORCING EFFECTS APPEAR TO BE LOW DOSES OF NICOTINE ADDED TO ACETALDEHYDE.' IN NON-TECHNICAL TERMS, WHAT ARE YOU SAYING THERE?

1723

"A THIS WAS PART OF OUR STUDIES THAT WERE LOOKING AT NICOTINE ACETALDEHYDE COMBINATIONS. BOTH NICOTINE AND ACETALDEHYDE EXISTS IN CIGARETTE SMOKE. AND WE DETERMINED EARLIER THAT ACETALDEHYDE, ITSELF, CAN FUNCTION AS A POSITIVE REINFORCER FOR RATS. AND IF YOU PUT THE TWO TOGETHER, YOU HAVE WHAT WE CALL A SYNERGISTIC OR SUPER ADDITIVE EFFECT WHERE WITH BOTH COMPOUNDS TOGETHER, THE RAT WOULD WORK HARDER FOR IT THAN EITHER COMPOUND ALONE. AND WE WERE ASKED TO DETERMINE IF WE COULD IDENTIFY OPTIONAL RATIOS, AN OPTIMAL COMBINATION OF TWO DRUGS THAT WOULD PRODUCE THE GREATEST AMOUNTS OF RESPONDING ON THE PART OF THE RAT.
"Q AND WHEN YOU GO TO PAGE 68, IT MENTIONS ELECTROENCEPHALOGRAPHIC ANALYSIS. SO YOU DID THESE BRAIN WAVE TESTS ON RATS?
"A CORRECT. THOSE WERE DONE AT ROCHESTER WITH LEO ABOOD. THERE WERE TWO TRIPS WHERE WE ACTUALLY WENT UP TO HIS LAB TO WORK THERE FOR A PERIOD OF TIME.

1724

"Q AGAIN, WHAT WERE THE ELECTROENCEPHALOGRAPH RESULTS, GENERALLY SPEAKING, IN A NON-TECHNICAL WAY, IN THE RATS THAT WERE SELF-ADMINISTERING BOTH NICOTINE AND ACETALDEHYDE?
"A WELL, IN THESE STUDIES WE WERE ACTUALLY JUST GIVING THE COMPOUNDS TO THE RAT. THESE RATS WERE ANESTHETIZED ON THE TABLE AND WE

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

WERE MEASURING THEIR BRAIN ACTIVITY.
"AND AGAIN, WE FOUND IF WE GAVE TWO COMPOUNDS TOGETHER, THEY INTERACTED TO PRODUCE CHANGES IN THE HIPPOCAMPUS, THAT'S A LARGE AREA OF THE BRAIN, THAT DIFFERED FROM THE EFFECTS OF EACH COMPOUND ALONE.
"SO IF THE -- AT THE BRAIN LEVEL, THE TWO DRUGS WERE WORKING TOGETHER TO PRODUCE EFFECTS THAT YOU DIDN'T FIND WITH EITHER DRUG ALONE.
"SO IT PROVIDED SOME BRAIN SUPPORT FOR THE BEHAVIOR WE WERE MEASURING IN THE SELF-ADMINISTRATION STUDIES.
"Q NOW, THE NEXT EXHIBIT I WANT TO ASK YOU ABOUT IS PLAINTIFF'S EXHIBIT 5453. NOW, THIS

1725

IS A MEMO FROM YOU AND DR. DENOBLE TO DR. DUNN, APRIL 21, 1982.
"AND I GUESS, AGAIN, THIS IS WHAT, YOUR ANNUAL REPORT?
"A YES, THIS IS AN ANNUAL REPORT. AGAIN, THESE ARE DONE EVERY YEAR.
"THERE WERE OFTEN A LOT OF SMALL MEMOS DURING THE YEAR. BUT EVERY YEAR WE SUMMARIZED AGAIN WHAT WE WERE DOING AND WHAT WE WANTED TO DO, WHAT WE WERE FINDING. SO THE COMPANY WAS AWARE AT ALL TIMES OF OUR ACTIVITIES AND OUR RESULTS.
"Q NOW ON PAGE 16 OF THIS DOCUMENT, DR. MELE, THAT'S A HEADING CALLED 'RESULTS.' AND IT SAYS 'THE RESULTS SHOW THAT ACETALDEHYDE READILY PERMEATES THE BLOOD, BRAIN BARRIER.'
"WHAT DOES THAT MEAN?
"A THAT MEANS, IF YOU INJECT ACETALDEHYDE INTO A VEIN, THE SAME VEINS WE WERE USING WHEN WE WERE DOING THE SELF-ADMINISTRATION STUDIES OR IN SOME CASES WE LOOKED AT TAIL VEINS, BUT WHEN YOU INJECT IT RIGHT INTO THE BLOOD STREAM, IT PASSES THE

1726

BLOOD BRAIN BARRIER AND GETS INTO THE BRAIN.
"THE BLOOD BRAIN BARRIER IS A SERIES OF TIGHTLY GROWN TOGETHER CAPILLARIES, SMALL BLOOD VESSELS THAT TRY TO KEEP OUT THINGS THAT DO NOT BELONG IN THE BRAIN, THINGS YOU FIND IN YOUR PERIPHERAL BLOOD SYSTEM.
"BUT ACETALDEHYDE CROSSES THAT BARRIER, GETS INTO THE BRAIN AND THESE STUDIES AT ROCHESTER IDENTIFIED THAT.
"Q AND THE SIGNIFICANCE OF THE SUBSTANCE THAT IS ABLE TO CROSS THE BLOOD BRAIN BARRIER IS WHAT?

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Stanford Libraries industrydocuments.ucsf.edu/docs/yrhd0001

"A WELL, IT SHOWS THAT IT CAN GET INTO THE BRAIN. AND IF IT CAN GET INTO THE BRAIN, IT CAN ALTER THE BRAIN. IN A CASE WHERE YOU HAVE AN ANIMAL SELF-ADMINISTERING A DRUG, THE BASIS FOR ALL DRUG SELF-ADMINISTRATION IS CHANGE IN THE BRAIN OR BRAIN ACTIVITY. AND THIS JUST CONFIRMED THAT ACETALDEHYDE DOES, INDEED, GET INTO THE BRAIN AS A BASIS FOR SELF-ADMINISTRATION.

"Q WHEN YOU TALK ABOUT THE CONCEPT OF BEHAVIOR AND DRUGS

1727

WHICH MIGHT ALTER BEHAVIOR, IS THERE ANY PART OF THE BODY OF EITHER A RAT OR A HUMAN BEING WHICH IMPACTS AND EFFECTS BEHAVIOR OTHER THAN THE BRAIN?

"A WELL, THEORETICALLY, YES. YOU COULD PARALYZE AN ANIMAL WITH CURARI, THEN HE WOULDN'T RESPOND VERY WELL BECAUSE HE CAN'T MOVE. YOU CAN MAKE AN ANIMAL VERY SICK AND ILL IN HIS G.I. TRACT AND THEN IT BECOMES VERY OBVIOUS WHEN ANIMALS LIKE THAT, AND THEY MAY NOT RESPOND VERY WELL.

"BUT FOR ANY DRUG OF ABUSE, THE LOCATIONS INVARIABLY HAVE ALWAYS BEEN FOUND TO BE ACTIVITY IN THE BRAIN.

"Q THE NEXT DOCUMENT, PLAINTIFF'S EXHIBIT 5335, AND THIS IS ACTUALLY A MEMO FROM DR. DENOBLE TO DR. CHARLES IN JULY OF 1982, WHERE AMONG THE OBJECTIVES RECITED IS, HE SAYS, NUMBER 1, 'TO DEVELOP A BEHAVIORAL PROFILE OF THE REINFORCING EFFECTS OF NICOTINE IN ACETALDEHYDE, IN (A), UNDER NUMBER 1 IS, DEFINE A RATIO OR RATIOS OF ACETALDEHYDE TO NICOTINE THAT WILL HAVE OPTIMAL REINFORCING EFFECTS. AND (B) IS TO

1728

EXAMINE THE POTENTIAL PHYSICAL DEPENDENCE PRODUCING PROPERTIES OF ACETALDEHYDE.'

SO PUT THAT IN A FRAMEWORK THAT WE CAN ALL UNDERSTAND.

"A THESE JUST OUTLINED A SERIES OF STUDIES WE WERE DOING WITH THE NICOTINE ACETALDEHYDE COMBINATION, AGAIN, TO IDENTIFY HOW NICOTINE AND ACETALDEHYDE INTERACT TO PROMOTE MORE SELF-ADMINISTRATION BEHAVIOR ON THE PART OF THE RAT, TO DETERMINE WHETHER THERE WAS A PHYSICAL DEPENDENCE PRODUCING EFFECT OR A WITHDRAWAL EFFECT OF THESE COMBINATIONS WHICH WAS ASKED FOR BY THE COMPANY AGAIN, WITH THE IDEA THAT THIS WAS VERY EXCITING DATA. THIS WAS A VERY HOT TOPIC AT THE RESEARCH CENTER. THERE WAS A GREAT INTEREST AT, LIKE THE ANALOGS,

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/yrhd0001

21 THIS INFORMATION COULD BE USED
22 SUBSEQUENTLY IN A PRODUCT, IT WOULD
23 MAINTAIN OR ENHANCE SMOKING BEHAVIOR,
24 YOU KNOW, OF A PRODUCT.
25 "Q AND DR. MELE, THEN
26 THE NEXT EXHIBIT IS PLAINTIFF'S
27 EXHIBIT 5447. NOW, THIS, APPARENTLY,
28 IS ANOTHER ARTICLE THAT YOU AND
1729
1 DR. DENOBLE DID, THE TITLE OF WHICH IS
2 'NICOTINE AS A POSITIVE REINFORCER FOR
3 RATS, EFFECTS OF INFUSION DOSE, AND
4 FIXED RATIO SIZES.'
5 "SO FIRST OF ALL, TELL US
6 WHAT THAT TITLE MEANS AND WHAT THE
7 FOCUS OF THE RESEARCH WAS.
8 "A THIS COVERED SOME OF
9 THE EARLY SELF-ADMINISTRATION RESULTS
10 WITH THE RATS. ONE OF THE THINGS YOU
11 DO WHEN YOU HAVE ANIMALS
12 SELF-ADMINISTERING A DRUG, YOU WANT TO
13 KNOW THE EFFECT OF DOSE. LIKE ANY
14 DRUG, DOSE IS CRITICAL. TOO LITTLE
15 DOESN'T DO ANYTHING. TOO MUCH, IT CAN
16 BE TOXIC OR HAVE ADVERSE EFFECTS. AND
17 SOMEWHERE IN THE MIDDLE IS YOUR
18 OPTIMAL DOSE.
19 "SO THIS WAS, AGAIN, ONE OF
20 THE EARLY STUDIES TO TRY AND DETERMINE
21 WHICH DOSE THE RATS LIKE THE MOST OF
22 NICOTINE AND TO SEE HOW MUCH
23 RESPONDING WE COULD GET OUT OF THEM AT
24 THAT DOSE.
25 "FIXED RATIO SIZE WAS A WAY
26 TO LOOK AT HOW HARD THE RAT WOULD WORK
27 TO GET THE NICOTINE, HOW MANY TIMES HE
28 WOULD PRESS A LEVER TO GET ONE
1730
1 INFUSION.
2 "Q AND WAS THIS ARTICLE
3 EVER PUBLISHED?
4 "A THIS ARTICLE
5 ULTIMATELY EVOLVED INTO ONE OF THE
6 OTHER ONES YOU SHOWED ME, THE
7 SELF-ADMINISTRATION, AGAIN, THIS WAS
8 ACCEPTED TWICE AND RETRACTED TWICE --
9 "Q I AM NOT SURE IF I
10 DID THIS ALREADY. PLAINTIFF'S EXHIBIT
11 5451, 'NICOTINE TITRATION HYPOTHESIS
12 REVIEW,' PRINTED IN 'PSYCHOLOGICAL
13 BULLETIN,' DATED JUNE 6TH, 1983, FROM
14 DR. W. L. DUNN, WHO CIRCULATED IT TO A
15 NUMBER OF PEOPLE, INCLUDING YOURSELF.
16 SO WHY DON'T YOU TAKE A LOOK AT THAT
17 AND TELL US WHAT IT IS.
18 "A YEAH, THIS IS AN
19 ARTICLE THAT APPEARED IN THE
20 PSYCHOLOGICAL BULLETIN, ONE OF THE,
21 PROBABLY THE TOP JOURNALS THEN, AND
22 EVEN NOW, ON A LOT OF ASPECTS OF
23 BEHAVIOR, INCLUDING DRUG ADDICTION.
24 BILL DUNN, EARLY ON, WHEN I GOT THERE,
25 AS I MENTIONED, AS THE HEAD OF THE

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

26 BEHAVIORAL RESEARCH UNIT, HE WOULD
27 REGULARLY SCOUR THE LITERATURE, FIND
28 RELEVANT ARTICLES AND CIRCULATE THEM
1731
1 AROUND THE RESEARCH CENTER.
2 "IN THIS CASE, IT LOOKS LIKE
3 IT WENT UP TO THE VICE-PRESIDENT,
4 LAWYER MAX HAUSERMAN, AND ALL THE
5 DIRECTORS, BILL FARONE, OSDENE AND
6 THOSE GUYS.
7 "SO DUNN BASICALLY WAS
8 CIRCULATING, ON A REGULAR BASIS,
9 ARTICLES, CURRENT LITERATURE ON THE
10 QUESTION OF NICOTINE AND ADDICTION AND
11 HOW IT IS BEING STUDIED AND THE
12 IMPLICATIONS, THAT SORT OF THINGS.
13 "SO HE WAS KEEPING PEOPLE UP
14 WITH THE LATEST SCIENTIFIC RESULTS.
15 "Q OKAY, DR. MELE.
16 "WHEN YOU TESTIFIED LAST
17 WEEK AND DESCRIBED FOR THE JURY AN
18 INSTANT WHERE THE PRESIDENT OF PHILIP
19 MORRIS CAME DOWN FROM NEW YORK ALONG
20 WITH A LAWYER FROM PHILIP MORRIS TO
21 WALK THROUGH THE LAB AND GO THROUGH
22 THE LABORATORY, DID THERE COME A TIME
23 WHEN SOMEONE FROM, AN EXECUTIVE FROM
24 PHILIP MORRIS NAMED JOE REMMINGTON
25 INSPECTED THE LAB?"
26 MR. CARLTON: THE NAME IS "JIM."
27 MR. PIUZE: WHAT DID I SAY?
28 MR. CARLTON: "JOE."
1732
1 MR. PIUZE: JIM REMMINGTON.
2 "A YES, MR. JIM
3 REMMINGTON WAS, YES, HE WAS LOCATED IN
4 RICHMOND. HIS TITLE WAS, I BELIEVE,
5 DIRECTOR OF OPERATION SUPPORT. THERE
6 WERE THREE COMPONENTS IN RICHMOND, THE
7 RESEARCH CENTER, THE OPERATIONS CENTER
8 AND THE MANUFACTURING CENTER.
9 "HE WAS CONSIDERED A V.I.P.,
10 YOU KNOW, HE WAS TALKED ABOUT
11 FREQUENTLY. AND ONE DAY JIM CHARLES
12 BROUGHT HIM INTO OUR LAB FOR A PRIVATE
13 TOUR. HE SAW THE RATS
14 SELF-ADMINISTERING NICOTINE. HE GOT A
15 QUICK DISCUSSION OF WHAT WE WERE DOING
16 AND WE PROCEEDED TO HAVE A DISCUSSION
17 ON, JIM CHARLES WAS TRYING TO MAKE
18 SOME FINER POINTS, TECHNICAL POINTS,
19 DRUG ABUSE, ESPECIALLY AS IT RELATES
20 TO CIGARETTE SMOKING AND --
21 "Q OKAY. YOU WERE
22 DESCRIBING A SITUATION WHERE JIM
23 REMMINGTON WAS GETTING THE V.I.P.
24 TOUR, WHERE THERE WAS A DISCUSSION,
25 AND WHAT WAS THE DISCUSSION ABOUT?
26 "A WELL, AGAIN, WE WERE
27 GIVING HIM A TOUR OF OUR WORK AND
28 TELLING HIM WHAT WE DID AND WHAT WE
1733
1 FELT IT MEANT. AND JIM CHARLES WAS

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - https://industrydocuments.ucsf.edu/docs/yrhd0001

MAKING SOME SUBTLE POINT OF CIGARETTE
SMOKING AS IT RELATES TO DRUG ABUSE.
AND JIM REMMINGTON JUST STOPPED --
JUST STOPPED HIM IN HIS TRACKS,
INTERRUPTED HIM AND SAID SOMETHING TO
THE EFFECT OF, 'WE ALL KNOW IT IS
ADDICTING, IT'S ADDICTING AS HELL.'
"Q DON'T TELL US WHAT
HE SAID ABOUT HIS PERSONAL SITUATION.
JUST TELL US WHAT HE SAID, IF HE SAID
ANYTHING MORE GENERALLY ON THE SUBJECT
OF WE ALL KNOW IT IS ADDICTING
"A WELL, AGAIN, HE
SAID, 'WE KNOW IT IS ADDICTING, IT'S
ADDICTING AS HELL. AND OUR REAL
CONCERN IS STOPPING THESE ANTI-SMOKING
PEOPLE OUTSIDE THE GATES.'
"Q NOW, YOU SAY JIM
REMMINGTON WAS TALKED ABOUT AND HE WAS
GETTING THE V.I.P. TOUR. WHAT WAS
YOUR UNDERSTANDING OF HIS POSITION
WITH PHILIP MORRIS?
"A WELL, HE WAS, OTHER
THAN A HIGH LEVEL EXECUTIVE, THERE ARE
MANY OF THOSE, WE DIDN'T SEE MANY, NOT
MANY CAME TO OUR LAB. THOSE THAT THEY
BROUGHT IN, THEY BROUGHT IN FOR A
1734
REASON, TO TRY TO SHOW THEM WHAT WE
WERE DOING.
"HE WAS AN EXAMPLE OF ONE OF
THE FEW V.I.P.'S THAT CAME TO THE LAB
AND GOT A DIRECT TOUR AND DISCUSSION
OF WHAT WE DID."
MR. PIUZE: YOUR HONOR, THAT'S THE END OF
THIS NEXT TRANSCRIPT.
AND ONCE AGAIN, THE WAY IT HAS TO
WORK IS THIS WILL BE AN APPROPRIATE TIME FOR A
SMALL BREAK.
THE COURT: ALL RIGHT, I UNDERSTAND.
ALL RIGHT, LADIES AND GENTLEMEN.
WE HAVE SOME MORE WORK WE NEED TO DO BEFORE WE CAN
GO TO THE NEXT TRANSCRIPT AND WE WILL SEE YOU AT
1:30 THIS AFTERNOON, THANK YOU VERY MUCH.

(AT 12 NOON, THE LUNCH
RECESS WAS TAKEN TO
1:30 P.M. OF THE SAME DAY.)

(THE FOLLOWING PROCEEDINGS
WERE HELD IN OPEN COURT OUT
OF THE PRESENCE OF THE JURY:)

THE COURT: OUTSIDE THE PRESENCE.
MR. PIUZE: I APOLOGIZE, I ACCEPT
RESPONSIBILITY. IT'S MY BAD MANAGERIAL THINGS AND
1735
I WON'T LET IT HAPPEN AGAIN.
THE COURT: SO LET'S WORK THIS WEEKEND ON
THIS, THE PROCESS, IF WE HAVE ANY MORE OF THIS TO
DO.
MR. PIUZE: YES, SIR.
THE COURT: NOW, LET ME ASK YOU AND THE

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/yrhd0001

7 DEFENSE LAWYERS, YOU KNOW, THEY NEED TO HAVE AN
8 OPPORTUNITY -- WHAT'S HAPPENING IS THEY ARE SORT OF
9 BEING TAKEN INTO THE JURY ROOM AND SHOWN THE
10 TRANSCRIPT, AND JUST BEFORE IT IS GOING TO GO ON,
11 AND I'D LIKE THEM TO HAVE A LITTLE BIT MORE
12 OPPORTUNITY THAN THAT. AND I THINK THEY WOULD
13 REQUEST THAT FROM THE COURT ON THEIR OWN.
14 THIS AFTERNOON, AFTER WE DO THIS
15 NEXT TRANSCRIPT, WHAT DO WE HAVE LEFT?
16 MR. PIUZE: BEFORE I ANSWER THAT, LET ME
17 JUST JUMP BACK, I ACCEPT RESPONSIBILITY.
18 THE COURT: I HEARD YOU.
19 MR. PIUZE: THIS WASN'T -- THIS WAS OUR
20 LAST AMENDED -- WE HAVE BEEN IN THE PROCESS OF BACK
21 AND FORTH.
22 THE COURT: ALL RIGHT.
23 MR. PIUZE: EITHER MR. BOEKEN ON TAPE OR
24 PERSONALLY. AND I JUST DON'T KNOW AND I WON'T KNOW
25 UNTIL I SEE HIM. YESTERDAY HE SAID HE WASN'T UP TO
26 IT.
27 AND WE HAVE ONE OF THESE OTHER
28 TRANSCRIPTS TO GO. AND JUST DEPENDING ON HOW MY,
1736
1 YOU KNOW, I AM LOOKING AT THE JURY, OBVIOUSLY,
2 TRYING TO FIGURE OUT IF I AM BORING THEM TOTALLY TO
3 DEATH AND I AM JUST NOT SURE HOW IT WILL GO.
4 THE COURT: YOU USE YOUR OWN JUDGMENT ON
5 THAT. THAT'S NOT MY JOB.
6 IF YOU HAVE A TRANSCRIPT LATER THIS
7 AFTERNOON, IS IT READY TO GO?
8 MR. PIUZE: WE ARE WORKING ON THAT.
9 THE COURT: ALL RIGHT.
10 MR. PIUZE: WE ARE TOLD THAT THIS NEXT
11 TRANSCRIPT IS RELATIVELY NON-CONTROVERSIAL.
12 THE COURT: I WOULD EXPECT COUNSEL TO
13 WORK OVER THE LUNCH HOUR AND MAKE SURE THAT THIS IS
14 ALL DONE.
15 MR. PIUZE: SURE.
16 THE COURT: THANK YOU VERY MUCH MY GOOD
17 COUNSEL. WE WILL SEE YOU AT 1:30 THIS AFTERNOON.
18
19 (AT 12 NOON, THE LUNCH
20 RECESS WAS TAKEN TO
21 1:30 P.M. OF THE SAME DAY.)
22
23
24
25
26
27
28
1737
1 MASTER INDEX
2
3 DAY DATE PAGE VOLUME
4 THURSDAY APRIL 5TH, 2001 11A 1639
5
6
7
8 W I T N E S S E S
9 WITNESS DIRECT CROSS REDIRECT RECROSS
10 MELE, 1647
11 PAUL C.

http://legacy.library.ucsf.edu/tid/tom05a00/pdf Digitized by the Tobacco Industry Documents Library at UCSF http://www.industrydocuments.ucsf.edu/docs/yrhd0001

(READ FROM TRANSCRIPT)

http://legacy.library.ucsf.edu/tid/tom05a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/yrhd0001